CORPORATE SOCIAL RESPONSIBILITY

2017

cargolux

you name it, we fly it !

cargolux

you name it, we fly it !

CSR REPORT 2017

AT A GLANCE

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CORPORATE SOCIAL RESPONSIBILITY

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AT A GLANCE

1

WE FLY IT WORLDWIDE - CHINA - ZHENGZHOU

VISION, MISSION AND VALUES

OUR VISION

To be ‘The Global Cargo Carrier of Choice’

OUR MISSION

We deliver consistent flexibility and reliability through our valued and dedicated employees creating sustainable benefits for all stakeholders in a safe environment.

THE CARGOLUX SPIRIT

- Leading by example
- Respecting each other
- Working as a team
- Being dedicated and passionate
- Going the extra mile
- Being cost efficient
- Being flexible
- Delivering service excellence

CHAIRMAN'S LETTER

In 2017, positive global economic growth and strong market demand had a powerful impact on the air cargo industry. These drivers, paired with Cargolux's focus on optimizing performance and enhancing customer relationships translated into the best year in the history of the company.

With Richard Forson at its helm, Cargolux is taking a thoughtful approach to the future; focusing on strategic and tactical actions to seal its position as a key player in the industry, and become the Global Cargo Carrier of Choice. The ground-breaking partnership with Emirates SkyCargo enables Cargolux to offer additional connections and expanded horizons to its customers. The agreement promises the smooth transition of freight between the two operators providing more options and enhanced flexibility, for its customers around the world.

In China, our relationship with our shareholder, HNCA and the Chinese government, continues to be cemented through constructive dialogue and action.

Cargolux is the largest cargo carrier in its Zhengzhou hub and I expect that our expanding footprint in China will encourage sustainable and mutually beneficial relations with our Chinese counterparts. Our expansion in this region also supports the One Belt, One Road strategy to promote the air corridor, the Air Silk Road, along this important route. I am confident this venture will pave the way for many more successful collaborations.

As I watch Cargolux's evolution, I am reminded that, no matter what the economic situation, the organization will strive to optimize performance and seize opportunities. This determination and willpower is what sets it apart from the crowd. Cargolux and its people are a shining example of how an organization driven by a focus on flexibility and sustainability can accomplish wonders.

Finally, my thanks go out to Richard Forson for his excellent leadership, and to the Cargolux team for their continued efforts and achievements. I also welcome Isabelle Goubin and Li Weidong to the Cargolux Board; we are looking forward to your contribution and leadership, and I thank our retiring Board Member Etienne Reuter who provided clarity and guidance over the past, sometimes tumultuous, years.

Paul HELMINGER,
Chairman of the Board

CEO'S LETTER

The year 2017 proved to be an extremely busy but inspiring year for the Cargolux Group. As the markets gained strength and the global economy picked up speed after many challenging years, the demand for airfreight capacity rose significantly reflecting increasing customer requirements. Our financial performance significantly exceeded our original expectations and the Group recorded its best year yet in terms of financial performance and a historical high in terms of tonnes sold.

The past year saw the Cargolux Group begin a journey of transformation with the introduction of the Cargolux 2025 strategy. The scheme focuses on ensuring business sustainability through lean and flexible processes as well as technological and digital enhancement in line with our "lean and green" philosophy, and the development of people skills to ensure the Group remains financially sustainable at all times. Our focus on and value offering to our customers will be of prime intent as part of this strategy. Of equal importance will be the change that the digital revolution's impact will have on our business and that of our customers.

The implementation of our strategy aims to capitalize on and solidify our market presence, taking the aforementioned into account, to establish Cargolux as the Global Cargo Carrier of Choice.

Cargolux has expanded its global network further with the addition of 2 destinations in Africa: Douala in Cameroon and Lubumbashi in the Democratic Republic of Congo. The company also introduced 4 weekly flights between Luxembourg and the Ecuadoran capital, Quito. These strategic gateways offer customers a better coverage of these regions and opens the door for further development in the future.

Our presence in China, and Zhengzhou particularly, continues to show excellent results with the opening of a direct line between Zhengzhou and Atlanta and Zhengzhou and Stansted to cater for the growing demand for transpacific and European connections respectively.

A strong foundation was also laid to promote strategic cooperation and financing opportunities between Cargolux and several Chinese financial institutions, with offices in Luxembourg, to boost and strengthen business links between both countries.

Cargolux's partnership with Emirates SkyCargo was further developed in 2017, with the introduction of a code sharing scheme. This new agreement builds on an already strong collaboration and includes cargo handling agreements to facilitate a smooth transition of freight between the two operators' hubs in Luxembourg and Dubai World Central. This cooperation illustrates the opportunities for like-minded corporations, intent on excellence, to come together to provide even better options for their customers.

We have also received several awards which bear witness to the commitment and motivation of all our employees and are the recognition of their commitment and hard work. These awards represent our peers' recognition of our outstanding customer service, our efforts in sustainability, our quality communication with staff and clients, and our focus on excellence in the cargo industry.

All these achievements would not have been possible without the unfaltering dedication and passion of our colleagues and the trust and confidence of our customers. I would like to thank the entire Cargolux team for going above and beyond expectation and to extend my gratitude to our loyal customers for their continued support.

The growth of the airfreight industry in 2017 came with its load of challenges and unforeseen situations which were skillfully handled at all levels to provide our customers with the service excellence they expect from us. The commitment, efforts and expertise deployed in 2017 truly reflect the spirit of our company and we look to the future with confidence. I am highly appreciative of our dedicated staff for the unwavering passion that keeps Cargolux connected to our customers, and at the forefront of our industry as 'The Global Cargo Carrier of Choice'.

I would also like to thank our Board of Directors for their continued support of management and in the implementation of the strategy for the Cargolux Group.

2018 OUTLOOK

The strong market demand experienced in Q4 of 2016 continued throughout 2017, providing record highs in a number of areas. For 2018, we are cautiously optimistic. It is important to stress that the industry continues to work with increasingly shorter time frames. Despite an improving economy, the markets' unpredictability as well as geopolitical developments create more volatility and we remain vigilant to react quickly to any changing circumstances.

Richard FORSON,
President & CEO

HIGHLIGHTS – CONSOLIDATED FIGURES

As at december 31		2017	2016	2015	2014
	Total income in US$ '000	**2,263,553**	1,755,737	1,861,126	2,154,880
	Profit/loss for the year in US$ '000	**122,301**	5,533	49,479	2,854
	Shareholders' equity in US$ '000	**985,365**	838,001	822,996	664,128
	Tonnes sold	**1,067,238**	964,131	889,652	828,658
	Tonne-kilometers flown (millions)	**8,480**	7,550	6,919	6,364
	Available tonne-kilometers (millions)	**12,102**	11,310	10,499	9,514
	Number of employees worldwide	**2,027**	1,968	1,880	1,776
	Headquarters	**1,436**	1,389	1,335	1,305

Fleet	2017	2016	2015	2014
Boeing 747-8 Freighter	**14**	14	13	11
Boeing 747-400 Freighter	**11**	10	9	8
Boeing 747-400 ERF	**2**	2	2	1
Boeing 747-400 BCF	**0**	0	2	2

CORPORATE GOVERNANCE AS AT APRIL 2018

BOARD OF DIRECTORS

Luxair representatives

Paul Helminger
Chairman of the Board of Cargolux
Chairman of the Board, Luxair Group
Director

Adrien Ney
President and Chief Executive Officer, Luxair Group
Director

Françoise Thoma
President & Chief Executive Officer
Banque et Caisse d'Épargne de l'État
Director

Tom Weisgerber
Premier Conseiller de Gouvernement,
Ministry for Sustainable Development
and Infrastructure
Director

Luxembourg State Representative

Isabelle Goubin
Director General of Treasury,
Fiscal Policy and Financial Services
Ministry of Finance
Director

BCEE Representative

Guy Rosseljong
Executive Vice President
Member of the Executive Committee,
Banque et Caisse d'Épargne de l'État
Director

SNCI Representative

Société Nationale de Crédit et d'Investissement (SNCI)
Director (corporate mandate) represented by
Patrick Nickels
Conseiller de Gouvernement 1ère classe

Cargolux staff representatives

Bettina Faulhaber (until 18/09/2017)
Einar Kristjansson (until 18/09/2017)
David Massaro (until 18/09/2017)
Armand Seil (until 18/09/2017)

Carlo Fonseca (as of 18/09/2017)
Senior Analyst M&E Systems
Director

George Karambilas
Captain
Director

Fabien Kowolik (as of 18/09/2017)
Controller Maintenance
Director

Darrell Myers
Captain
Director

Dirk Winne (as of 18/09/2017)
Assistant Lead Technician
Director

HNCA representatives

Li Weidong
Chairman of Henan Airport Group
Director

Mingchao Zhang
Chairman of Henan Civil Aviation Development
and Investment Co, Ltd
Director

Shengbo Yuan
Deputy General Manager of Luxembourg Project
Office of HNCA
Director

COMMITTEES OF THE BOARD OF DIRECTORS

Compensation Committee

Paul Helminger
Françoise Thoma
Tom Weisgerber
Mingchao Zhang

Audit Committee

SNCI represented by **Patrick Nickels**
Françoise Thoma
Tom Weisgerber
Shengbo Yuan

EXECUTIVE COMMITTEE

RICHARD FORSON
President
and Chief Executive Officer

MAXIM STRAUS
Executive Vice President
and Chief Financial Officer

EMESE BEKESSY
Executive Vice President
HR, Legal Affairs & Compliance

ONNO PIETERSMA
Executive Vice President
Maintenance & Engineering

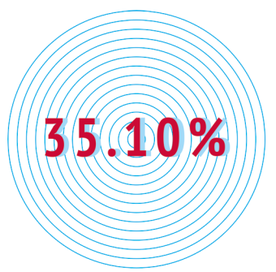
LARS SYBERG
Executive Vice President
Global Logistics

NICOLAAS VAN DER WEIDE
Executive Vice President
Sales & Marketing

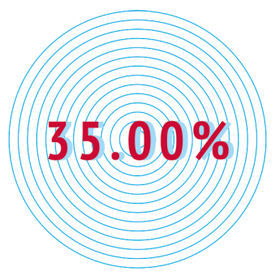
CLAUDE ZEHREN
Executive Vice President
Flight Operations

SHAREHOLDERS

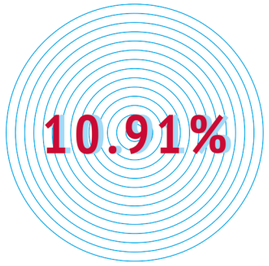
AS AT DECEMBER 31, 2017



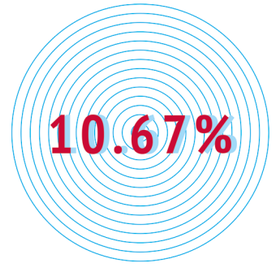
LUXAIR



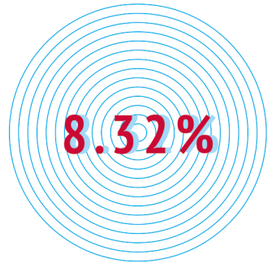
HNCA
(LUXEMBOURG) SARL



BANQUE ET
CAISSE D'ÉPARGNE
DE L'ÉTAT



SOCIÉTÉ NATIONALE
DE CRÉDIT ET
D'INVESTISSEMENT



LUXEMBOURG
STATE

2

CORPORATE SOCIAL RESPONSIBILITY AT CARGOLUX

WE FLY IT WORLDWIDE - LUXEMBOURG

SUSTAINABILITY REPORT 2017

CORPORATE SOCIAL RESPONSIBILITY AT CARGOLUX

Cargolux has been a signatory to the United Nations Global Compact, and enthusiastically committed to applying its principles, since 2007. The airline also actively supports the 17 Sustainable Development Goals (SDGs), which came into effect in 2016 and form the heart of the UN's Agenda 2030.
The airline has selected seven priority goals that fit into its four CSR pillars of Environment, People, Communities and Customers.

Cargolux recognizes its responsibility for addressing environmental issues and is excited to be involved in raising awareness among its staff and within the industry. Sustainability makes sense. The airline's commitment is ongoing and strong. Cargolux knows that by endorsing the Sustainable Development Goals it can help lead the industry to a better understanding of options and potential. We are in this together. Each saving, whether fuel or paper; each reduction, whether noise or CO_2 emissions; is another step towards better business and a better environment.

Cargolux is deeply rooted in Luxembourg.
It is a home-grown success story, and as such, one of the key players in the local transportation industry. Cargolux ranks in the top ten most attractive employers and is an outstanding ambassador for the Grand Duchy. Just as Luxembourg's national branding encourages its businesses and population with a 'Let's make it happen', Cargolux does; *You name it, we fly it*.

Cargolux's deep roots in the country hail back to its inception in 1970. This longevity has awarded it strong ties with local government, communities and other industry organizations. The company's commitment includes promoting cultural and sports activities at home and abroad, as well as education, research and support for humanitarian NGOs.

Over the last decade especially, the logistics industry has seen the rapid introduction of green technologies, process automation, software systems and high-tech advances in warehousing and tracking systems, as well as more collaboration in the supply-chain. The 'Cargolux 2025' strategy, prepares the company to take on the challenge of the digital age. It aims at ensuring a sustainable future of digitalization and innovation.

The company's CSR program, in place since 2008, uses input from stakeholders and aligns with business development goals. Despite the highly competitive nature of the air freight industry and challenging conditions in past years, Cargolux has eagerly upheld its commitment to Corporate Social Responsibility.

MESSAGE FROM THE CEO

GRI 102-14

LEADING WITH RESPONSIBILITY

The Cargolux Group is committed to corporate social responsibility. We strive to always do our best in this important area of business, and we encourage and support suppliers who follow CSR principles. While most organizations are coming to understand and respect the need for environmental and socially responsible measures, we need more than respect. We need deep and abiding accountability.

Here, at Cargolux, we have been committed to tangible action and reporting against our CSR's Key Performance Indicators, since 2008. This CSR report provides details of our work in sustainability and social responsibility over the past year, and of ongoing programs that are fundamental to making a difference for our company, the community, and the environment.

Central to our Cargolux 2025 strategy are 3 pillars: Strategic Measures, Business Process Review and the Digital Roadmap. These goals are reflected in virtually all activities we undertake, especially within the context of CSR. Ultimately, our main responsibility is to ensure the continuity and sustainability (financial, environmental and social) of the organization.

Among our CSR successes this year are progress in noise abatement, reducing fuel consumption, pilot support and development, automation and digitalization, and improved collaboration.

I am thankful and appreciative of all of our employees who show such confidence and pride in our organization and who are also confident of their abilities and committed to influencing the future. I am proud and grateful to be associated with a team that puts energy and enthusiasm into caring for the environment as well as our financial sustainability. I applaud the many people in Cargolux who are mobilized around CSR principles, and the Sustainable Development Goals. Every day we see that positive environmental and social measures are good for us, good for our customers and, indeed, good for our business.

RICHARD FORSON
President and Chief Executive Officer

ABOUT THE COMPANY

GRI 102-1, GRI 102-2, GRI 102-3, GRI 102-4, GRI 102-6

In a world of increasingly complex logistics requirements, Cargolux Airlines International S.A. has established itself as a leading provider of reliable, high-quality air cargo services, and the Global Cargo Carrier of Choice. Starting with only a handful of CL-44 aircraft, the company has developed into Europe's largest all-cargo airline, operating a steadily expanding fleet of efficient, purpose-built Boeing 747-8 and 747-400 freighters.

Cargolux was the world's first operator of both aircraft types and uses its modern fleet and a number of trucking contractors to move valuable and time-sensitive commodities on its worldwide network that covers some 90 destinations with more than 85 offices in over 50 countries.

Cargolux Italia is Cargolux's affiliate airline based in Milan, Italy. In 2016, it was Italy's largest all-cargo carrier with a market share of 14.5%. Meanwhile, Cargolux has established a second hub in Zhengzhou, China, that complements the group's home base in Luxembourg. Cargolux today is considered the indisputable air freight specialist to China, with daily flights to Zhengzhou, Shanghai and Hong Kong. All in all, the company offers more than 80 weekly connections between Europe and China.

Five weekly transpacific flights connect Zhengzhou with Chicago and Atlanta. With these, Cargolux operates 15 weekly direct transpacific connections from mainland China, Hong Kong, Japan, Singapore and Malaysia to key gateways in the United States, making Cargolux one of the few cargo carriers operating transpacific routes with the advantage of nose-door equipped 747 freighters.

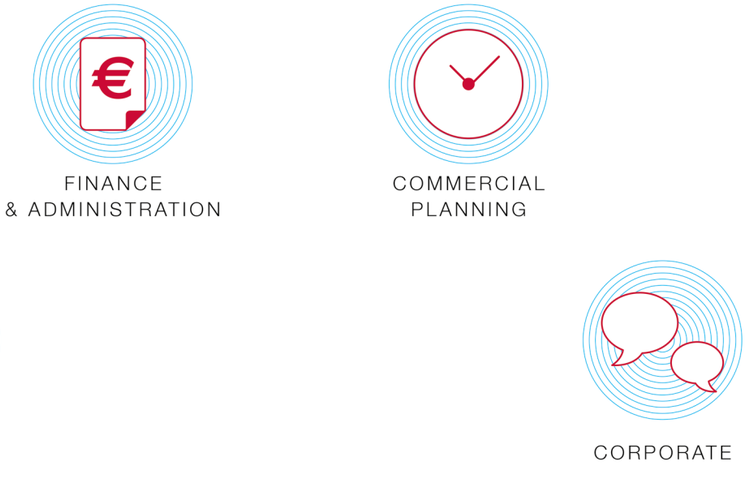
Spreading its wings for a global reach underlines Cargolux's vision and supports its strategy to grow from a single hub in Luxembourg to multiple gateways in Milan, Zhengzhou, Hong Kong and Chicago.

In more than 45 years of operations, Cargolux has become an expert in handling a variety of delicate types of shipments. Live animals, perishables, temperature-sensitive shipments and outsize freight benefit from the experienced Cargolux touch. The airline offers an extensive product portfolio that gives customers expert treatment for even the most unusual requirements. With this portfolio, Cargolux continues to build on its existing core competency, pushing global consistency and leveraging the evolution of its global presence. The airline's focus is industry-specific needs – it thinks beyond the flight and responds to customers' door-to-door requirements.

Cargolux's flexible charter services offer the advantage of guaranteed capacity availability. The airline operates a number of dedicated charter aircraft that can be deployed at very short notice. With staff stationed across the globe, Cargolux Charter gives customers 24/7 coverage.

The company's maintenance center in Luxembourg also offers third-party maintenance services, specializing in Boeing 747 line and hangar maintenance up to and including C-Checks. Its service offering includes a range of specialized maintenance services such as, but not limited to, avionic modifications, structural repairs and worldwide AOG support.

ORGANISATIONAL STRUCTURE



KEY FIGURES

FIRST GDP CERTIFIED AIRLINE WORLDWIDE

FIRST LEAN & GREEN CERTIFIED AIRLINE WORLDWIDE

6TH WORLDWIDE EUROPE'S LARGEST ALL-CARGO AIRLINE

MORE THAN 70 SCHEDULED FLIGHT DESTINATIONS WORLDWIDE

1,916 STAFF WORLDWIDE[1]

1,436 EMPLOYEES IN LUXEMBOURG[1]

8,480 MILLION TONNE-KILOMETERS FLOWN

14:51 HOURS AVERAGE DAILY AIRCRAFT UTILIZATION

27 AIRCRAFT

[1] This number indicated filled positions

PRECAUTIONARY PRINCIPLES AND RISK MANAGEMENT

GRI 102-11

Cargolux is firmly committed to ensuring full compliance with all applicable laws and regulations, as well as adherence to internal rules and policies. The airline is convinced that ethical corporate and individual behavior is a precondition for sustainable and profitable business relationships, fostering trust and avoiding the risk of reputational or other damage.

Prevention is rooted in the Cargolux Ethics Code and Policies that form the company's constitutional documents, and which are updated regularly as per business requirements and regulatory changes. They summarize the principles that guide the Cargolux staff in doing business. Good, sustainable business is always driven by values and The **Cargolux Spirit** outlines the 8 core principles that drive our business and relationships.

The Enterprise Risk Management (ERM) program was further developed in 2017. Following a stringent methodology, the top 10 strategic risks, as seen by senior management, were documented. These risks, along with major process-inherent risks, were used as a basis by Internal Audit for the 2017 risk-based Audit Plan.

The purpose of Internal Audit is to provide independent, objective assurance and consulting services that are guided by a philosophy to add value and improve Cargolux's operations. It assists Cargolux in accomplishing its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's risk management, control, governance and certain other processes related to the design and operation of internal controls.

BUILDING BRIDGES: COMPETENCY & CONFIDENCE

GRI 102-12, GRI 102-13

Cargolux takes its commitment to the business environment and industry seriously. Integral to the development of industry-wide solutions are partnerships and development.

Cluster for Logistics: Cargolux is a founder and Board Member of the Cluster for Logistics. This community seeks to promote Luxembourg as a logistics hub and gathers logistics service providers, research institutes and other organizations to build competencies and to continuously optimize activities, to benefit the customer.

UN Global Compact: Cargolux is committed to operating and acting in a socially and environmentally responsible manner. The company committed to the UN Global Compact in 2007, pledging to apply its 10 key principles, and actively supports the Sustainable Development Goals (SDGs), which came into effect in 2016.

IATA: The International Air Transport Association (IATA) is the trade association for the world's airlines. It represents approximately 265 airlines or 83% of all air traffic. As well as supporting many areas of aviation activity, it helps to guide and formulate industry policy on critical aviation issues.

Cargo iQ: Formerly the Cargo 2000 initiative, this IATA interest group aims to improve work processes in the air cargo transportation industry from shipper-to-consignee (end-to-end).

TIACA: The International Air Cargo Association (TIACA) represents, supports, informs, and connects every element of the global air freight supply chain. This organization provides a unifying voice for the industry, works for global standards, and raises the profile of air cargo.

Airlines for Europe (A4E): Cargolux joined A4E in 2016. Based in Brussels, A4E is Europe's largest airline association. It represents the interests of airline members, and their customers, in various policy areas, including European air traffic management framework reform, aviation emissions trading schemes, security issues and aviation taxes.

SAFUG: Cargolux is a founding member of the Sustainable Aviation Fuel Users Group (SAFUG), a cross-industry initiative aimed at promoting and bringing to market sustainable aviation biofuels.

Safety Management Best Practices: Several of the Cargolux Aviation Safety Department members are involved in external safety groups and contribute to generating industry best practices that can then be implemented within Cargolux. These groups include amongst others, EASA CAT-CAT (Civil Aviation Collaborative Analysis Group), the IATA Safety Group, the IATA Hazard Identification Task Force, and the EASA European Operators Flight Data Monitoring Initiative.

AWARDS, RECOGNITION

Cargolux believes strongly in service excellence. Personal contact and detailed attention to customer need is the foundation for a successful business and is built on cooperation and trust. With its activities, the airline seeks to boost the corporate and economic success of its partners. This has earned Cargolux a high level of trust and loyalty from its customers and partners in the industry. Many of these long-lasting partnerships have grown over decades, and Cargolux is proud that its efforts are recognized with the many industry awards it receives. Among the awards that Cargolux received in 2017 were:

STAT Times' International Award for Excellence: All Cargo Carrier of the Year, February 2017: Cargolux was selected for the 4th year running. This award recognizes customer dedication and the extensive Cargolux network in Africa. The company has a long-standing history and enjoys the continued loyalty and support of forwarders and shippers in this market. Cargolux is acknowledged as an expert in a range of diverse shipments, from perishables, fruit and flowers, to heavy machinery for the oil and gas industry.

Best All-Cargo Airline, April 2017: Cargolux again received the prestigious Best All-Cargo Airline award from the British trade magazine Air Cargo News. Cargolux was honored for its high-quality, first-class service and expertise provided to customers worldwide. An important element is Cargolux's close personal contact with, and attention to, its partners. Votes were cast by the international readers of Air Cargo News.

Best Green Airline (Asian Freight, Logistics and Supply Chain [AFLAS]), June 2017: Cargolux was recognized as a leading service provider committed to environmental awareness. Environmental awareness is an integral part of Cargolux's corporate culture. More than 15,000 readers of Asia Cargo News and e-news subscribers vote for this award.

Best Freighter Operator (Freighters World), September 2017: Cargolux was named Best Freighter Operator by Freighters World. Cargolux provided evidence of new products and routes, customer engagement, industry innovation through its alliance with Emirates SkyCargo, and investment in freighter aircraft. Winning this highly competitive category shows the market's recognition of Cargolux's unwavering commitment to quality, and their appreciation for its dedicated staff's performance.

Lean and Green: The LEAN and GREEN award was started by the Dutch Ministry for Infrastructure and Environment in 2008. This international initiative recognizes efforts to reduce carbon footprint (CO_2 emissions) in aviation logistics' by at least 10 percent in 5 years.

Today, Lean & Green Europe is the leading community for sustainable logistics in the EU. Lean & Green Europe combines corporate responsibility for reducing footprint with continuous improvement of operational performance and value for customers. It encourages businesses and governmental bodies to move to a higher level of sustainability by taking measures that yield cost savings ***and*** reduce environmental burden.

This Lean & Green Europe award recognizes Cargolux for successfully facing the challenge of finding a healthy balance between environmental and economic concerns. The airline's customers, logistics partners, and major forwarders of this world, are well aware of the Lean & Green program and appreciate Cargolux's efforts. Being Lean & Green certainly gives Cargolux a competitive advantage and underlines its commitment to always deliver the highest service excellence.

ECOVADIS: Cargolux continues to hold Ecovadis' Gold Rating status that was awarded in 2016. Ecovadis provides a solution for monitoring sustainability in global supply chains; Cargolux is one of the companies audited by Ecovadis. The audit produces a reliable assessment of the airline's corporate social responsibility performance through comprehensive feedback, benchmarks and tools. Its methodology is based on sustainable development standards of the Global Reporting Initiative GRI, the United Nations Global Compact and ISO 26000.

German Design Award: A development in October 2017 for Charlie Victor, the company's corporate magazine, was winning a special mention award for 2018[2]. The magazine was cited as a shining example of 'a new way of communicating both externally and internally'. This award was a welcome recognition of the innovative Cargolux communication program which showcases the added value of its services and the excellence of its outstanding staff. The Jury statement included…

"This contemporary design adroitly deploys elements from the air-freight industry, and in so doing underscores the publication's interesting and exciting content. An impeccably and convincingly executed publication that conveys all the excitement of flying."

International Creative Media Award[3]: The magazine was also rewarded by the International Creative Media Award (ICMA), which is a global competition for corporate media, books, corporate design and magazines. It honours quality, creativity and design in publishing. For the 2017 competition, a total of 376 publications from 27 countries were submitted to the jury. Cargolux publishes its customer and staff

[2] http://www.german-design-award.com/en/the-winners/gallery/detail/17031-charlie-victor.html
[3] https://www.icma-award.com/yearbook-8-icma-part-1-corporate-media/

magazine three times a year. It provides the latest news about people, processes, and technology that make Cargolux a leading player among the world's top air cargo carriers. Each issue also features a detailed photo spread of a selected destination from the airline's global network.

Getting two awards within four issues is no mean feat and with this second, prestigious award, Charlie Victor is now firmly placed among the premier corporate publications of 2017. All issues of Charlie Victor, The Cargolux Magazine, are available online: http://www.cargolux.com/media-room/publications/our-publications. Cargolux extends its thanks to the agency responsible for Charlie Victor, Maison Moderne, for its positive cooperation!

Certificates & Certification
In addition to the above awards, Cargolux is in the top 5 of IATA's world-wide all-cargo airline ranking for fuel efficient carriers.

Innovative concepts, and the constant drive for quality, ensure that Cargolux is always focused on developing and improving its business. Certification is an important element of any endeavor in this industry, and Cargolux prides itself on its achievements in this area.

GDP Certification: Cargolux was the first airline worldwide to receive the Good Distribution Practice (GDP) certification that attests that Cargolux's management system meets the requirements of the World Health Organization guidelines and the EU directive 'Guidelines on Good Distribution Practice of Medical Products for Human Use'. Reflecting this expertise in its CV Pharma product, one of eight specialized offerings in its product portfolio, makes Cargolux a preferred carrier for the transport of pharmaceutical goods, and underlines the company's commitment to the safe and fast movement of high-value, temperature-sensitive, healthcare shipments across its global network.

IATA Operational Safety Audit (IOSA): Cargolux Airlines International S.A. passed its sixth IOSA audit in 2017, with exceptionally good results. The IATA Operational Safety Audit (IOSA) program is an internationally recognized system designed to assess the operational management and control systems of an airline. It evaluates about 900 different standards. The exceptional result achieved by Cargolux is due, in part, to IOSA audit parameters being used in the affected systems and processes, thus providing guidance to teams, ongoing and accurate assessment of every impacted division.

As a member of IATA, Cargolux, like any other IATA member airline, must pass an initial IOSA audit and subsequent renewal audits every two years. Not only does this ensure a constant enhancement of aviation safety, it is recognized by insurers and a number of aviation authorities, such as the FAA, across the world. Cargolux passed its initial audit in 2007 and its long-term commitment to the IOSA registry underlines the airline's strong commitment to the safety of its operations, and its constant push for high safety standards within the airline industry.

OHSAS 18001 Certification for Health & Safety: This international certification provides evidence that the organization has a framework in place to identify, control and decrease workplace health and safety risks. Cargolux adheres to a rigorous health and safety policy which protects staff against possible occupational risks and also reduces the likelihood of accidents. Cargolux believes in proactively identifying health and safety risks and conforming to all local and international health and safety regulations.

ISO 14001 Certification: The ISO 14000 certification confirms that Cargolux follows practical standards for managing its environmental systems and responsibilities. It includes specific tools and approaches (e.g., audits, communications, labelling and life cycle analysis) to address environmental challenges such as climate change.

CSR PILLARS

Cargolux uses the following pillars to organize its business and interaction with customers and industry leaders.

Preferred Carrier **Customers**	Attractive Employer **People**	Green Cargo/Carrier **Environment**	Good Neighbor **Community**

Underpinned by

Aviation Safety

Regulatory Compliance

Compliance & Ethics

PROGRESS IN 2017

Cargolux is seeing a growing commitment for environmental and social awareness among its staff, its customers, and the industry. In 2017, Cargolux reviewed the CSR program in order to align the strategy and initiatives to the expectations of its stakeholders and the requirements for the sustainable future of the company.

A cross-divisional CSR committee jointly worked on a CSR strategy that incorporates and continues to contribute positively to existing programs and actions the company is taking: the quality of these programs has been recognized by authorities and organizations alike as shown by awards such as Lean & Green, or local labels, such as 'Superdreckskescht fir Betrieber'. Cargolux strives to continuously expand its engagement towards the environment, its neighbors and the people whose livelihood rely on the economic success of the company.

For this reason, the company has committed to embracing the UN Global Compact 2030 agenda and has structured the CSR report in line with the SDGs.

Moa SIGURDARDOTTIR
Head of Corporate Communications

"It is sometimes difficult to be on the vanguard of a movement, but with almost a decade of CSR reporting under our belts, Cargolux's commitment to social responsibility continues to grow every year. From the initial steps of creating awareness, and building engagement in pockets throughout the organization, we have become a triple-bottom-line culture (social, environmental and financial); embracing our role to develop and demonstrate tangible evidence that 'good for the environment' can be good for business… And that good for the community can be good for the company.

I am thankful for the support that our CSR program enjoys throughout the organization. From top management to the front lines, our people are talking about sustainability and responsibility. I am grateful for such innovative and enthusiastic team spirit, that buoys our efforts to always strive to be better, cleaner, faster, quieter.

For any complex subject, one of the main challenges is extracting and highlighting the essential elements to paint the details of our success story. This year, we hope that this new CSR format accomplishes that task. As well as addressing the Global Reporting Initiative (GRI) standards, it encompasses our commitment to the 2016 United Nation's Social Development Goals (SDGs). It describes not only the company's CSR endeavors, but also gives a view of some of the individuals who are making it happen. We hope that these pages illustrate the excitement we feel about our commitment to corporate social responsibility and translate the actions we are taking each day, into words that tell our story."

COMMITTED TO SUSTAINABILITY

Cargolux's CSR program focuses on four areas of priority for its business. Each area is driven by specific commitments, goals and targets that involve all stakeholders within the company. The CSR program supports the company's vision as the Global Cargo Carrier of Choice. Here are some of the 2017 achievements:

Pilot Support & Development: In 2017, Cargolux continued to roll out this important program that provides peer-to-peer support and guides pilots as they accumulate skill and knowledge to move forward in their careers.

Fatigue prevention: Safety is a significant pillar for Cargolux and a primary focus within all its activities. This year, we continued to refine the pilot fatigue prevention models and parameters.

Collaborative Culture: Connecting Flights, Just Culture and Brainwaves, are just a few ways that we are supporting trust-building, innovation, employee engagement, collaboration and transparency within the company.

Female pilots and apprentices: Cargolux prides itself on the balanced and welcoming company environment. Each year, it concentrates on ensuring that no matter the gender, ethnicity, or religious beliefs of an employee they are accepted and respected. The airline also believes that visible demonstration of our foundational principles is important. Cargolux employs staff from 70 different countries throughout the network. It is building towards gender inclusiveness in job categories that are normally male-dominated, such as flight crew and aircraft maintenance.

Innovation: Drone inspections, big data utilization, and digitization are all happening at Cargolux as it moves with excitement toward the future. Using squAIR-timber will also bring us closer to a sustainable and CO_2 neutral position.

Climate: Portable electronic flight bags, e-booking, a new trucking management system and paperless processes are all contributing to reducing any dependency on paper and/or heavy processes that cause waste. These projects are also helping Cargolux get closer to the customer and focus on its primary activities. The replacement of high-pressure Halogen (HQI) light fixtures in the hangar with LED lights resulted in energy savings and allowed the airline to take advantage of new technology in the field.

Caring Cargolux: Noise abatement programs such as APU off, Active Quiet Climb, Three Engine Taxi, and Constant Descent Approach are all projects that are succeeding… and making a difference for the communities around the Luxembourg hub.

STAKEHOLDER ENGAGEMENT & MATERIALITY

GRI 102-40

Stakeholders play an important role in Cargolux's activities and affect the company's business in many ways. Cargolux's stakeholders include shareholders, employees, customers, financial institutions, and suppliers. They extend to the communities potentially affected by the company's activities, primarily those around the airport of Luxembourg; its main operational hub. Finally, they also include government and local authorities, national and industrial representations, non-governmental organizations, and auditing bodies. Cargolux employs various means to interact and maintain transparency with its stakeholders, provide updates, developments, and to foster open dialogue which enables opinion and suggestion gathering.

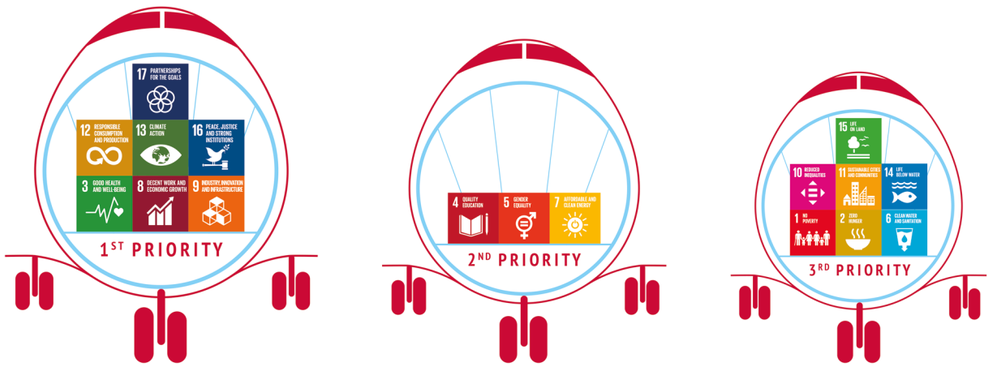
Externally: Cargolux continues to improve its communication vehicles; direct dialogue, written feedback, direct representation, events, the company website, social media platforms, customer magazine and media were all leveraged. Representatives of the company also participate in working groups in a range of areas, the purpose of which is to effect industry improvements and/or define benchmarks. Cargolux staff also attended conferences to increase and/or maintain its market visibility. Individual team members presented ground-breaking Cargolux initiatives such as Pilot Peer Support & Development.

Internally: emphasis was put on idea exchange, and dialogue with internal stakeholders. The Intranet, staff newsletters, mailings, company events, workshops and a variety of ongoing programs such as the **Connecting Flights** program, which focuses on enhancing understanding of the Cargolux key values and improving communication between management and staff to inspire a more congruent corporate culture. Various employee surveys were conducted to better understand the staff's view on internal programs and initiatives, (eg, Compliance and Corporate Training) in order to be able to better adapt such programs to the needs of the organization.

The company's CSR program was developed over the last couple of years, in line with the development of its business and with input from stakeholders. However, the identification and prioritization of key CSR issues remains an ongoing process that continuously evolves and provides a growing platform for stakeholder consultations.

With a focus on continuous improvement, Cargolux launched a 2017-2020 Stakeholder Engagement program.

The airfreight industry has fought a myriad of challenges and difficult conditions for a number of years. It is an increasingly difficult environment for maintaining a financially sustainable operation that also respects the demands and needs of its stakeholders. Yet, despite the challenges, Cargolux has been eager to uphold its commitment to Corporate Social Responsibility.



Cargolux 2017-2020 Stakeholder Engagement Program

GRI 102- 42, GRI 102-43, GRI 102-44, GRI 102-46, GRI 102-47

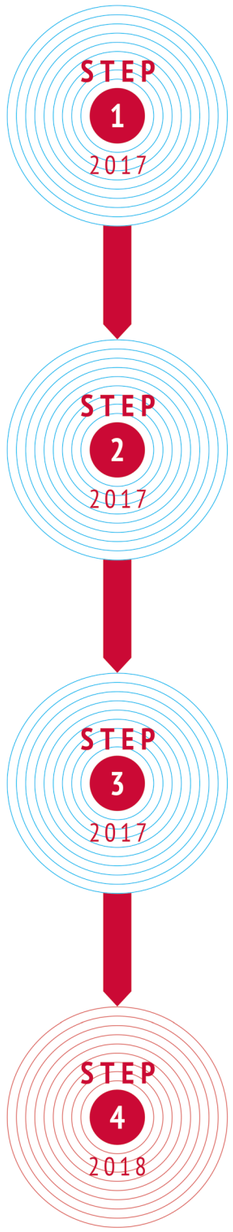
In September 2017, Cargolux launched a materiality assessment in collaboration with CCD Partners, GRI Certified Training Partner Luxembourg, to identify and prioritize material aspects and topics based on stakeholder expectations. The analysis resulted in the identification of 11 material topics within Cargolux's economic, environmental and societal context.

Cargolux believes that this focused list of material topics, linked to the United Nations Sustainable Development Goals, and combined with increased attention from senior leadership, will allow Cargolux's CSR team to further develop the CSR strategy; creating value for Cargolux and its stakeholders in the coming years. The following steps detail the methodology and process for 2017 Stakeholder Engagement Program:

Step 1

Develop an exhaustive list of issues

In this spirit, the materiality assessment started with in-depth desktop research on current market trends using a sector-specific benchmark analysis. The analysis was carried out using the applicable GRI sector supplement, as well as reports of B2C companies displaying high maturity in terms of CSR reporting and performance. The benchmark analysis resulted in a total of 42 topics distributed as follows: 7 economic topics, 13 environmental topics and 21 social topics.



Step 2

Gather input from internal stakeholders

Internal materiality assessment workshops, organized around the domains of Economy, Environment and Society took place in October 2017 and brought together subject matter experts from the various Cargolux operational areas. In total, 13 contributors took part in at least one workshop each including Human Resources & OHS, Compliance, Maintenance & Engineering, Environmental Management, Procurement, Flight Operations, Corporate Finance, Strategy & Development, Sales & Marketing, Global Logistics and Corporate Communications.

The above-mentioned 42 topics were prioritized according to their level of impact, occurrence, and the control that Cargolux exerts. An initial list of material topics emerged from these workshops.

1ST PRIORITY

1 6 7 12 13 16
21 22 27 31 34 35

2ND PRIORITY

2 3 4 5 8 9 10 11 14 17
18 19 20 23 24 25 26 28 29 30
32 33 36 37 38 39 40 41 42

1. Economic performance
2. Infrastructure investment
3. Investment for sustainable innovation
4. Local presence
5. Purchasing practices & supply chain sustainability
6. Competing fairly
7. Anti-corruption & anti-bribery policies
8. Air quality
9. Biodiversity & animal welfare
10. Efficient air traffic management
11. Environmental legislation & regulation
12. Emissions (aircraft & ground) & climate change
13. Fuel efficiency
14. Network efficiency
15. Noise
16. Material sourcing
17. Technical material
18. Supplier environmental assessment
19. Waste management
20. Water management
21. Job creation & retention
22. labor relations (stations)
23. Labor relations (Luxembourg)
24. Employee Engagement
25. Staff welfare
26. Staff diversity
27. Training & development opportunities
28. Attracting talent
29. Staff volunteering
30. Occupational Health & Safety (stattions)
31. Occupational Health & Safety (Luxembourg)
32. Human rights within Cargolux's operations
33. Human rights in the supply chain
34. Human rights - intermediaries, shippers
35. Package Contents Responsability
36. Business Continuity
37. Emmergency Preparedness
38. Digital & Physical Asset Security
39. Humanitarian Relief & Resilience
40. Customer Satisfaction
41. Data Privacy
42. Community investment

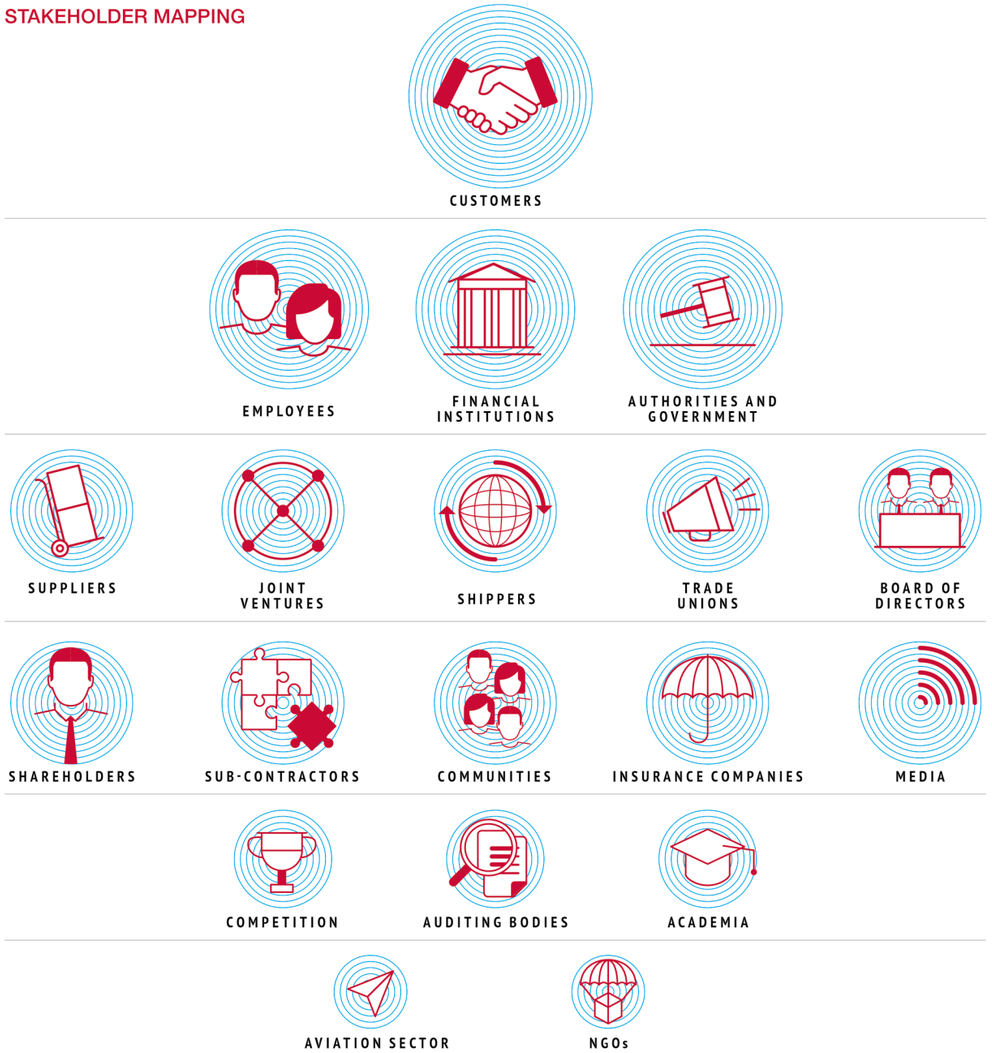
Step 3

Map internal and external stakeholders

After completing the thematic workshops involving a sample of internal stakeholders, Cargolux mapped both internal and external stakeholders which would gradually engage in the materiality analysis. The stakeholder mapping workshop resulted in a list of 19 stakeholder groups, prioritized according to their level of dependence on, and influence exerted upon Cargolux.

Based on this process and using output from the thematic workshops, the following materiality was established.

STAKEHOLDER MAPPING



The way ahead: United Nations Sustainable Development Goals (SDGs)

Following international trends, Cargolux also took first steps towards mapping and reporting on its contribution to the SDGs. Based upon information gathered at the thematic workshops, 7 priority SDGs were selected where the airline will concentrate its efforts and reporting.

To ensure a gradual and comprehensive internal and external stakeholder engagement, the Stakeholder Engagement Program plan will be executed from 2018 to 2020. Cargolux expects that increasing stakeholder engagement will allow it to identify and anticipate future sustainability risks and opportunities, and respond to stakeholder expectations more effectively.

OPERATIONAL SAFETY

Mattias PAK
VP Aviation Safety

"Our Safety Management procedures allow for quick identification of safety issues and support the organization operating in a safe way. During 2017, Safety Promotion initiatives resulted in an increased awareness regarding risk management. This development helps the organization to further identify safety issues before they become a problem. Safety is becoming our Philosophy, not a Duty!"

Cargolux maintains a Safety Management System (SMS) that is approved following regulations issued by the European Aviation Safety Agency (EASA) requirements using the guidelines and recommendations set by the International Civil Aviation Organization (ICAO). The SMS embraces Flight Operations, Maintenance and Engineering, Design Organization, Flight Crew Training (ATO & FSTD), Maintenance Training (MTO) and Ground Operations Divisions. All safety and risk management processes are documented in the Cargolux Management System Manual and are mandatory for all operational stakeholders. The Safety Management System is approved by the Luxembourg Civil Aviation Authority (DAC).

The SMS is overseen by a dedicated team of investigators, analysts, risk management and safety experts, who directly report to the accountable manager. Additionally, safety critical issues are quickly addressed through direct communication between the aviation safety department and the responsible process owners. The SMS includes proactive and reactive safety reporting, flight data monitoring, hazard identification, risk management and management of change procedures. These and other elements are used to identify and mitigate potential safety-related issues, thus keeping risks as low as reasonably possible and within acceptable levels.

The Cargolux Safety Review Board (SRB), the airline's highest governance body for safety-related issues, is comprised of all nominated persons[4], as required by EASA. This board regularly meets to analyze and advance the operational safety performance of Cargolux. A number of safety performance indicators measure the effectiveness of safety barriers and are regularly presented to the process owners, as well as the SRB, who collaborate to analyze potential problem areas and to take pro-active risk control action.

[4] The operator must have nominated persons, acceptable to the Authority, who are responsible for the management and supervision of Flight Operations; the Maintenance System; Crew Training; and Ground Operations.

Safety reports submitted via the SMS in 2017, included Air, Maintenance, Ground Safety, and Fatigue Reports. The increase in reports is a positive illustration of growing awareness in staff of safety issues, and the importance of safety reporting. A steadily increasing rate of proactive reports has allowed Cargolux to take actions before hazards become events.

Flight Safety: The Cargolux Safety Culture is open and transparent. Frequent and regular communication is conducted, safety reports and related investigation findings are distributed widely and used to increase awareness regarding risks and hazards.

Identified risks and hazards are also used to update Flight Training to reflect any new developments or insights. Data from the Flight Data Monitoring System is used to develop scenarios and identify 'hot topics' that are added to the training content. The annual training program is updated bi-annually to ensure it is timely and current.

SEE ALSO

- **ABOUT THE COMPANY:** Awards, Recognition and Certificates IATA Operational Safety Audit (IOSA)
- **SDG#8:** Decent Work and Economic Growth: *Crew Fatigue Prevention*

ETHICS AND COMPLIANCE

GRI 205-1, GRI 205-2, GRI 412-1, GRI 412-2

Cargolux has had a strong, comprehensive compliance program in place since 2010.
It safeguards the company's business environment and assets, and protects its employees by giving them the tools to better identify and address ethical challenges. The program involves all divisions of Cargolux worldwide and is actively supported by company management.
It is based on a set of well-thought-through policies, conduct guidelines, and is supplemented by regularly scheduled training, communication initiatives and a compliance management system, including a consultation desk function.

WHAT IS COMPLIANCE?

All employees and representatives of Cargolux are committed to following external laws and regulations, as well as the airline's internal policies, ethics codes and other guidelines that enable doing business in a fair, ethical and legal manner.

At Cargolux, the business faces exposure in several risk areas such as antitrust, anti-bribery, fraud and export restrictions. With the overall aim of protecting the company and staff from financial penalties, legal exposure, and reputational risk; the Compliance Department provides support and guidance to help navigate these hazards and provides proactive advice to prevent the occurrence of risky events. The department's functions are divided into three key areas; prevent, detect, and act *(see diagram above)*. But, the primary focus is to help Cargolux staff fulfill their compliance responsibility. Compliance is everyone's responsibility.

Javier COTO
VP Compliance

"For Cargolux to be successful, we must do everything in our power to know our business partners, compete fairly, and protect our assets. Our focus is to give everyone in the company the tools and knowledge they need to be effective in their job while being in compliance with regulations and standards."

The Cargolux compliance training program incorporates online and classroom sessions, with refresher training at regular intervals within a 3-year cycle. It provides an overview of the company's legal obligations, values and ethical principles, to all employees, sales agents and legal representatives. Topics include anti-bribery, competition law, conflict of interest, corruption, data protection and more.

Supporting Peace through Export Control: Comprehensive procedures, as well as manual and electronic control systems, ensure full compliance with restrictions and embargoes on specific countries, entities, and commodities. Targeted training communicates special procedures for shipping goods subject to export control measures and ensures that Cargolux staff and the airline in general, do not violate any regulations.

Confidential Reporting: Cargolux has a specialized, independent external organization to run its confidential reporting system. This enables individuals to report potential misconduct in complete confidence and helps Cargolux to uncover potential breaches of laws, internal rules, or procedures, and to prevent reoccurrence. Closer to the daily business, the company's internal Compliance Consultation Desk, accurately and quickly responds to employees' questions regarding applicable rules and their interpretation. Since its launch, it has seen continuous growth in the number of questions submitted. This demonstrates employees' increasing awareness regarding compliance risks.

Risk Analysis: Cargolux is headquartered in a country with very high standards with respect to observing human rights. Human rights issues therefore play a minor role in the company's daily business at its home base. However, Cargolux's service level agreements require that its partners and suppliers also comply with its values and ethics and observe human rights in their business activities. Cargolux deals with a wide variety of business partners and suppliers worldwide. To ensure that these companies comply with business ethics and principles, the company performs due diligence on partners classified as medium and high risk. This risk classification is country-specific, according to a corruption perception index, and is also based on the type of services rendered.

SEE ALSO

- **SDG#3:** Safety and Just Culture

COMPLIANCE

Supporting & Strengthening Business

GENERAL DISCLOSURES

In July 2017, the government outlined its 2030 Agenda[5], and 4 specific challenges relevant to Luxembourg. These include: large and rapid population growth, diversity in local working population, the economy's over-dependence upon the financial sector, and environmental and climate pressures. This 2030 Agenda, and these challenges, also align with the UN's 17 Sustainable Development Goals (SDGs).

Cargolux, along with a handful of other companies in Luxembourg, has embraced the 2030 Agenda and pledged its support to the UN's 17 Sustainable Development Goals. In order to focus on areas where Cargolux can affect change, the company has chosen to take action in the following 7 goals.

The format of this CSR report allows the showcasing of the 7 priority SDGs that are closest to Cargolux's heart, highlighting projects and initiatives which pertain to any SDG, to precisely identify their impact.

[5] http://www.luxembourg.public.lu/en/actualites/2017/08/08-agenda2030/index.html

CARGOLUX'S COMMITMENT TO THE SUSTAINABLE DEVELOPMENT GOALS

This section provides an overview of Cargolux initiatives which relate to the Sustainable Development Goals and align with Luxembourg's 2030 Agenda.

SDG#1: END POVERTY IN ALL ITS FORMS EVERYWHERE

Cargolux is grateful and appreciative that it has found a supportive and encouraging business environment in its home country, Luxembourg. The company recognizes that organizations in different countries in its extensive global network, have different challenges. Cargolux is committed to joining the fight against poverty in ways that acknowledge and respect local partners and cultures.

HELP TO HELP

FOC (Free of Charge) shipments: Cargolux puts effort into making space available for humanitarian causes by supporting NGOs bringing relief aid and medical goods to people affected by epidemics and natural disasters. Throughout the year, the company supported a number of NGOs and initiatives to endorse charity project for people in need. Sponsored transports included some charity shipments to support projects in Africa, and for the International Bazaar Luxembourg, (US, Hungarian, South African and Thai stands). Cargolux continues its long-standing support of the International Bazaar, one of Luxembourg's major annual charity events that brings together volunteers from over 50 nations to sell specialties from their home countries. The proceeds from these sales are distributed among a wide number of aid and relief projects large and small, throughout the world.

18
charity shipments

Cargolux continued its support to Hungary, USA, South Africa and Thailand for the Bazaar International in Luxembourg

OTHER CHARITY & SPONSORSHIP WORK

Charity and social support are not only part of the company's values, but also close to its employees' hearts. In 2017, the Cargolux staff sports clubs supported the 'Fondation Hellef fir Kriibskrank Kanner', a local organization that supports children suffering from cancer or other life-threatening diseases and their families. In addition, a group of employees participated in a variety of charity sport events, for example, after work swimming organized by the International Section of the Luxembourg Red Cross, and the Giant Public Pillow Fight organized in support of patients fighting Parkison's disease.

Charity, social support and sponsorship are also high on the company's and employees' agenda. Whether Cargolux is hiring technical helpers from ADEM, participating in a business run, sponsoring drinks at a local golf tournament, or collecting plastic bottle caps to raise funds that support **guide dog** programs, Cargolux and its staff are active throughout the year. Here are a few of the 2017 endorsements.

Fondation Hellef fir kriibskrank Kanner; a local organization that supports children suffering from cancer, or other life-threatening diseases, and their families.

Rock Against Cancer: a music event that supports Fondation Cancer Luxembourg and Fondatioun Kriibskrank Kanner in the fight against cancer.

Omega 90: is a charity that provides palliative care for terminally ill patients. Its aim is to improve quality of life for patients and for their families, through kind and gentle treatment and prevention of suffering, whether physical, emotional, mental or spiritual.

Charity shipments: Throughout the year the company supported a number of NGOs and initiatives to sustain charity projects for people in need. Sponsored transports included shipments for the US, Hungarian, South African and Thailand stands at the International Bazaar Luxembourg.

SDG#3: ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

GRI 403-1, GRI 403-2, GRI 403-4

This SDG encompasses initiatives aimed at ensuring that Cargolux personnel are comfortable and healthy at work and in their day-to-day lives. Promoting good health and well-being is of critical importance to Cargolux. The airline recognizes that the level of team-work and collaboration enjoyed throughout the organization is energizing, but also challenging for staff in this very competitive environment. In the 2017 reporting year, the Cargolux team went above and beyond to meet requirements that included a steady stream of customer requests and business. The company's commitment is to provide as much support and as many systems as is reasonably possible to ensure a healthy and satisfying work environment.

Cargolux tracks types and rates of injury, occupational diseases, lost days, absenteeism, and the number of work-related fatalities. It is fortunate, in Luxembourg, to have as a foundation, a very high standard of national health care. To complement this, Cargolux OHS department also provides information and recommendations on road safety, an international vaccination program, and an influenza vaccination campaign for all employees based at the HQ.

WELL-BEING PROMOTION

Throughout the year, Cargolux provides services that impact the health and well-being of its staff. The company promotes proactive dialogue and positive behaviour in key areas that affect well-being and health. Initiatives include: changing the in-flight caterer to ensure proper quantities and **healthier meal choices**; the provision of state-of-the-art **equipment and machinery** as well as **personal protective equipment** to appropriate staff / areas; and, new **locker rooms and shower facilities** for M&E staff. **SOS International services** provides traveling Cargolux employees with a mixture of technical and on-the-ground sources to keep staff safe 7 days/week and 24 hours/day (24/7), virtually anywhere in the world. Through SOS international support, CV staff traveling to countries affected by sudden security concerns get immediate access to real-time information on developing situations and guidance on how to react appropriately to any security issue. As the airline operates in a large number of countries that are affected by a variety of diseases (eg, Zika, Malaria, Yellow Fever, etc.) the company offers a **vaccination program to employees based at Headquarters** and maintains a monitoring and information program on outbreaks throughout the world.

Management recognizes the importance of sport and fitness to balance stress. Sports groups provide a platform for cardiac and other forms of physical health as well foster team spirit; a positive contributor to emotional/mental health. Cargolux supports 12 different sports clubs run by employees. The company regularly supports and sponsors Cargolux teams to raise funds for charity.

Gunnar STEINHARDT
Manager Human Factors

"The most important duty for me, as a Human Factors Manager, is to offer support to our pilots, throughout their career - from their first steps as Junior First Officer up to the level of a highly qualified and experienced Captain. From a human factors perspective, the establishment of Peer-to-Peer Support and the integration of Pilot Development Programs are core initiatives for a well-protected career as an esteemed colleague at Cargolux."

PILOT SUPPORT & DEVELOPMENT

Whether it be through personal interaction, fatigue or job-related circumstances, pilots, like professionals in other fields, are regularly subject to stress. Peer-to-Peer Support and Pilot Development Programs provide support to pilots and foster development at every stage of their career. These programs form the cornerstones that ensure Cargolux pilots are ready, able, and confident. Peer support is an important, and integral element to support ongoing pilot mental health. Cargolux has partnered with Stiftung Mayday to ensure that trained peers are equipped to provide advice and counsel to pilots undergoing critical temporary conditions. The Pilot Development Programs focus on personal development and growth throughout a pilot's career from First Officer to Captain. The programs focus on the needs and requirements of pilots in respect to their level of experience and their seniority within Cargolux. The Pilot Development Programs; Pilot Initial Guidance & Support, First Officer, and Captain Development Programs, form the other three cornerstones of this joint, pilot support and development approach. This program aligns with European Aviation Safety Agency (EASA) recommendations.

SAFE AT CARGOLUX

Safety is the highest priority for Cargolux and its commitment to a safety culture remains as high as always. The airline takes a long-term view of its business and its reputation, and knows that both are contingent on the safety of teams and assets. In this high-risk, ultra-safe industry, Cargolux uses both a top-to-bottom and bottom-up approach to engage the whole organization in managing risk.

Safe Workplace: Work plays a central role in people's lives as they spend a large part of each day in the workplace. Recognizing this, Cargolux believes that a work environment should be safe and healthy, where its employees feel comfortable and protected during their workday, as well as inspiring and conducive to creativity. The Cargolux Occupational Health & Safety (OHS) Department promotes health and safety awareness using a variety of systems and tools such as a dedicated intranet site to promote safety practices. Aimed at creating a system of continuous improvement, this site shares information and promotes prevention. In an ongoing campaign, OHS runs a sensitivity program aimed specifically at staff working in high-risk areas ensuring, with their on-site presence, a clear understanding of Safety Operating Procedures (SOPs).

Health & Safety: Cargolux strives to provide its employees with a safe and healthy workplace. The company offers an environment where its employees feel comfortable and protected during their daily work. To this end, Cargolux has in place an effective health and safety management system that is aligned to the CWA (Collective Work Agreement) and includes formal joint management-employee health and safety committees. Cargolux holds an OHSAS 18001 certification for its Health & Safety Department. As well, in 2017, the department welcomed a delegation from the European Commission that was interested in understanding how Cargolux is applying EU regulations, especially in risk areas.

Security Intelligence & Analysis Service (SIAS): In alignment with the company's Mission, SIAS's goal is to ensure that Cargolux people, stakeholders, and assets, operate in a safe environment. SIAS provides Cargolux Corporate Security with protective and strategic intelligence capabilities 24/7. In a very dynamic security environment, this support enables the department to produce quick and confident security risk assessments based on the latest information.

	2017
Lost days for sickness	**13,576**
Lost days for accidents	**386**

Luc LOSCHETTER
Manager Operational Health & Safety

"Our daily goal is to ensure that no employee is performing a job which could be considered unsafe or unhealthy. The Health and Safety of each employee is the overriding priority of our organization. We are continuously improving our SOPs, involving our employees in every single step of this development."

SEE ALSO
- **OPERATIONAL SAFETY**
- **SDG#8:** Decent Work & Economic Growth: *Teamwork & Commitment*

SDG#4: ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

GRI 404-1, GRI 404-2, GRI 404-3

Cargolux focuses on attracting and securing a motivated and highly qualified workforce that can address current activity requirements and future needs. The airline puts strong emphasis on supporting future professionals and participates in a range of initiatives annually that include school visits, internship programs, and events, that give youths the chance to gain personal impressions of daily work requirements in the air freight industry, first-hand information about career opportunities, explore job opportunities and possible career paths.

TRAINING
on average, each employee enjoyed 77 hrs of training in 2017

8 EMPLOYEES
doing an educational program supported by the company

CORPORATE TRAINING

Human Resources (Corporate Training) is dedicated to ensuring all Cargolux personnel meet their full potential. The department offers a variety of programs that enhance team spirit and individual growth.

Cargolux is interested in knowing its people; what motivates them, what makes them unique, and how to optimize the fit between organizational needs and individual career aspirations.
The company knows that when people are happy with what they do, they are able to tap their full potential and perform at their best. In this way, training and development supports business continuity and increases individual job satisfaction. Corporate Training constitutes one of four major pilars in Cargolux's training activities, next to Flight Training, Maintenance & Engineering Training and Ground Ops Training. Training services are not only provided to employees but are also open to contractors in developing countries.

17% of management staff receive regular performance and career development reviews

The philosophy for corporate training
Continuous learning and development are central to Cargolux's philosophy. The company has a strong focus on teaching and learning at all levels in the organization. The aim is to retain and develop talented individuals, and to develop skills and capabilities for Cargolux's future success.

Developing people
The aviation industry demands high standards of expertise, training, development and regulatory compliance. Cargolux staff are highly skilled, experienced professionals, who follow an extensive program of mandatory and regulatory training to maintain and upgrade their licenses, technical skills, and competencies. The company offers a variety of mandatory training and personal development opportunities that go far beyond these regulatory and mandatory requirements.

Within this framework, employees have access to a variety of soft skills training on subjects such as time management, conflict management and presentation skills. On-the-job training also plays an important role in building specialized skills. Knowledge and expertise is grown from direct experience gained from working beside talented colleagues.

In line with the philosophy of continuous learning, employees are encouraged to work towards relevant degrees or other professional qualifications.

Developing the leaders
Cargolux is continuing to engage and invest in the growth of leadership capabilities. The company has a well-established team leader and management development program.

The reporting year has seen the development and implementation of an orientation program for new managers. In partnership with an external training provider, Cargolux has also initiated an Executive Leadership Development Program. The program provides a platform for senior and future leaders to develop their leadership capabilities in line with the organizational vision and corporate strategy.

12 people were enrolled in the **EXECUTIVE LEADERSHIP DEVELOPMENT PROGRAM**

More than 50 employees are in the **MANAGEMENT DEVELOPMENT PROGRAM**

Performance management and succession planning
Cargolux recognizes that its future success depends on a dedicated and talented team. To safeguard internal knowledge and skills, and to ensure ongoing operational activity, a succession planning framework was implemented. This aligns with Cargolux's commitment to career development for all employees in the company's global network, and a structured appraisal framework for all managers.

Developing learning approaches and capabilities
As the workforce grows, so do its digital capabilities. A key focus in the reporting year has been the implementation of a new Human Capital Management tool. Once fully implemented, this will give employees and managers the ability to manage, access and track their learning centrally. It will also provide a platform for recruitment, onboarding, performance management, succession planning, and talent management.

Cargolux continues to review its approach to learning. This year, staff were given the opportunity to help shape the future of learning here at Cargolux through a staff survey. They shared their ideas on preferred learning modes, development needs, and suggestions for new approaches. This will contribute to future learning strategies.

SEE ALSO
- **SDG#3:** Good Health & Well-Being, Pilot Support Development
- **SDG #5:** Gender Equality

SDG#5: ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

GRI 102-41, GRI 401-1, GRI 401-3, GRI 404-1, GRI 405-1

Cargolux is blessed with a population from 70 countries throughout the network, and 44 countries at the HQ Luxembourg. Its people recognize excellence and collaboration. The airline enjoys a workplace where people are judged by their ideas and contribution, not by their gender, religion, or ethnicity. Equality programs include:

Part-time for all employees:
Cargolux flight crews enjoy an enhanced part-time scheme. In 2017, a new permanent, part-time option was added, allowing pilots in the program to take 4 extra days of off-time during the first 10 months of the year, and 3 during high season. This, like the other part-time options, is optional and voluntary and must be agreed between the individual and company.

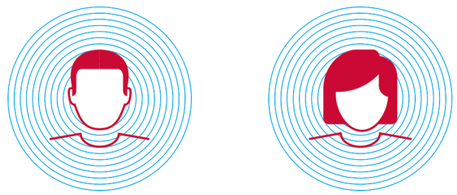
Ground staff also has the opportunity to work part-time. Requests are evaluated in line with business requirements.

Gender balance & equivalence: In an extremely male-dominated industry, Cargolux strives to provide an environment, programs and initiatives that support diversity and gender equality. Two women serve on the Board of Directors, one serves in the Executive Committee, and five (including excom) are in executive management (VP and above).

Female pilots and apprentices: Cargolux prides itself on the balanced and welcoming company environment. Each year, the airline concentrates on ensuring that no matter the gender, ethnicity, or religious beliefs of an employee they are accepted and respected. Cargolux also believes that visible demonstration of its foundational principles is important. The company employs staff from 70 different countries throughout the network and is working toward gender inclusiveness in job categories that are normally male-dominated.

TURNOVER RATE

4.5% worldwide



2.4% Men

2.1% Women

Under 30: **0.6%**
30-50: **3%**
Over 50: **1%**

PARENTAL LEAVE

21 men and 3 women took parental leave in 2017

SEE ALSO
- **SDG#8:** Youth Training and Development

SDG#8: PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

GRI 102-8, GRI 102-16, GRI 102-41, GRI 204-1, GRI 401-1, GRI 405, GRI 301-1, GRI 302-1, GRI 302-3

With relatively stable workforce growth, Cargolux also supports numerous jobs in industries directly related to its air freight activities, in Luxembourg and throughout the world. Cargo/Logistics account for 2,910 jobs at Luxembourg airport with 46% of direct employment. This includes employment of freight forwarders, storage facilities, as well as Cargolux Airlines International and Luxair cargo employees[6].

Cargolux falls within the top 10 of Luxembourg's most attractive employers[1] and is one of the largest employers in the private sector[2].

For its employees based in the Grand-Duchy, Cargolux follows Luxembourg labor law regulations, such as parental leave, which rank among the highest employment standards within the EU. In addition, a Collective Working Agreement (CWA) is in place to ensure advantageous conditions for Cargolux employees. 86% of employees fall under the CWA. Cargolux also offers a Swiss Life Pension scheme for Luxembourg based staff and comprehensive business travel insurance coverage for all employees worldwide.

	2017	2016	VARIATION
Total	**1,916**	1,856	+3.2%
Luxembourg based employees	**1,436**	1,389	+3.4%
Rest of the world	**480**	467	+2.8%
Full-time	**1,775**	1,726	+2.8%
Part-Time	**148**	147	stable
Employees CWA	**1,240**	1,199	+3.4%

Includes apprentices, trainees and pilots, both temporary and firm.

	2017	2016	2015
Staff worldwide[7]	**1,916**	1,856	1,779
Staff at headquarters	**1,436**	1,389	1,335
Staff with permanent contract%	**97%**	97%	91%
Staff covered by CWA (LUX)%	**86%**	86%	87%

[6] http://www.statistiques.public.lu/fr/actualites/entreprises/transports/2015/05/20150527/20150527.pdf
[7] This number indicated filled positions
[1] https://www.randstad.lu/en/hr-mag/archives/who-is-the-most-attractive-employer-in-luxembourg-_179/
[2] Luxembourg in Figures, 2017, STATEC, September 2017 (ISSN 1019-6448x)

TEAMWORK & COMMITMENT

In line with its vision to be the Global Cargo Carrier of Choice, Cargolux's mission is to deliver consistent flexibility and reliability through its valued and dedicated employees, creating sustainable benefits for all stakeholders in a safe environment. Knowing that its success relies on the commitment of its workforce, Cargolux gives high importance to building and nurturing mutually beneficial long-term relationships with its employees. The reputation and the achievements of Cargolux are built on team spirit and family-like atmosphere among the staff. This atmosphere has been instrumental in the company's growth and prosperity. Maintaining it is essential to ensuring the airline's long-term success in an increasingly competitive market environment.

In working towards realizing its strategic ambitions, the airline decided in 2016 to place an even stronger emphasis on reinforcing its key values, which make up the Cargolux Spirit. A culture enhancement program, "**Connecting Flights**", was launched in 2016 and continued into 2017.

Emese BEKESSY
EVP HR, Legal affairs and Compliance

"We know that succeeding in the current dynamic, ever-changing world requires us to make some profound changes to how we work and how we think. That goes beyond modifying processes and systems; we also need to change our mindsets and our relationship to change itself. HR aims to be a key enabler for the Cargolux 2025 transformation journey by helping develop our employees' resilience, agility, capability and confidence to succeed, across the board. With Connecting Flights and other strategic HR initiatives we want to engage, enable and motivate our people so that they feel connected, ready and able to work together on shaping a successful future for Cargolux."

Connecting Flights focuses on living the eight core values of the Cargolux spirit. The eight core values are the hallmark of Cargolux's success and act as the key guiding principles for the company's employees in their day-to-day activities that bring the airline's mission to life.

These values serve as the foundation for an even stronger, more agile and forward-looking global team, and are at the center of the 'Connecting Flights' program. This program aims at reshaping the company's culture and revitalizing Cargolux's spirit. In 2017, the program focused on 'V2B - Values to Behavior' workshops, encouraging employees to openly discuss and align their understanding of the core values and to translate that understanding into everyday behaviors that contribute to a positive workplace culture. As well as aligning the company's culture, and revitalizing Cargolux's unique spirit, 'Connecting Flights' also aims to provide a platform for tapping into the creativity and drive of employees all over the organization in order to bring about improvements and new ideas in open, collaborative cross-divisional working groups established outside the traditional hierarchical structures.
These initiatives are expected to enhance the outcomes of the recently launched Business Process Review, which aims at further improving the efficiency and excellence of Cargolux's business activities. This initiative increases collaboration across departments and locations, and supports Cargolux in realizing its vision.
The project is closely aligned with other strategic talent management initiatives such as succession planning, clarification of career paths and talent development, including management and leadership trainings. This holistic approach aims at increasing the resilience of the organization and further developing key skill sets by building on the strengths of the airline's employees throughout its extensive global network.

FATIGUE MANAGEMENT

The organization has recognized crew fatigue as a hazard that must be monitored and managed. Consequently, the Cargolux Fatigue Risk Management System (FRMS) is an integral element in its Safety Management System (SMS), using recommended practices based on ICAO guidelines. A dedicated group of FRMS Safety Officers, pilot representatives and flight operations management, meets regularly to discuss fatigue-related issues and recommend processes and procedures to reduce and/or manage crew fatigue.

FLIGHT TRAINING

The Cargolux Flight Academy fulfills Cargolux Group pilot training requirements and also markets crew training capacity to third-party customers. In contrast to other providers who mainly employ retired pilots, Cargolux's trainers are active line-pilots with an average of 15,000 flight hours, and over 20 years of 747 experience at Cargolux under their belt. In addition, as cargo pilots, Cargolux trainers are well versed in operating to demanding schedules and can transfer knowledge regarding special requirements related to difficult airfields in remote or less than ideal locations that passenger airlines do not frequent.

Cargolux was the launch customer for the Boeing 747-8F, it also introduced the world's first 747-8F simulator and has since converted it to Level D status, the highest possible qualification. Cargolux, today, employs one of only four advanced 747-8 training units worldwide. Both Cargolux simulators, the 747-400F and the 747-8F, are equipped with state-of-the-art visuals.

The airline's Flight Academy is the only approved training organization worldwide to offer 747-line training to third-party pilots. It also markets the capacity of Luxair's new cabin training simulator to third parties.

YOUTH TRAINING AND DEVELOPMENT: FUTURE CARGOLUXERS RECRUITMENT

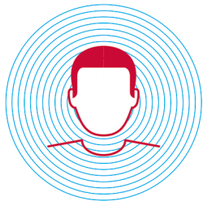
As an investment in the future, the airline seeks to support Luxembourg youth in their career choices and decisions. Cargolux seeks to sponsor the next generation of air cargo professionals through close cooperation with schools and institutes in Luxembourg. The Cargolux Human Resources (HR) team performs presentations about the company at schools associations and other institutions. The team also attends events for job seekers, presenting openings and career opportunities at the airline. Cargolux welcomes and offers CIE contracts in collaboration with ADEM, Luxembourg government's employment agency.

Helping First-Time Jobseekers: Cargolux actively supported two programs run by Luxembourg's Employment Administration (ADEM), which aim at facilitating young job-seekers who have completed their studies to access on-the-job training and gain professional experience. One is the "Contrat d'Initiation à l'Emploi" (CIE), which provides a legal framework for on-the-job training positions, in accordance with Luxembourg labor law, setting remuneration levels and other practical modalities. At the same time, the employment administration waives employer contributions and participates in the trainee's remuneration, making this scheme attractive both for employers and first-time jobseekers.

CARGOLUX'S SUPPORT TO YOUTH IN LUXEMBOURG

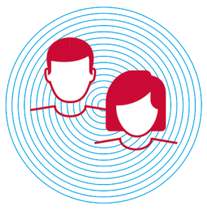
7
CIE contracts in 2017

10
maintenance apprentices

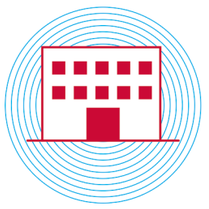


29
trainees

7
'Schnupperlehre'



5
school visits at Cargolux



9
visits to schools

About Apprenticeship: The airline has a long-term, cooperative relationship with Luxembourg's Lycée Technique Privé Emile Metz (LTPEM) that runs an aircraft mechanics apprenticeship program. Students that successfully pass their exam become B.1.1-licensed AML aircraft mechanics with an opportunity to gain employment at Cargolux.

B.1.1-licensed mechanics are certified to perform mechanical and/or avionic works during base- and line-maintenance. Graduates from Luxembourg's AML apprentice scheme obtain a license in accordance with EASA regulations, Part 66. After obtaining the AML, the junior mechanics must complete an in-house type rating training for the 747-400F and 747-8F aircraft to be fully licensed to work on Cargolux aircraft. The practical part of the apprenticeship takes place in Cargolux's own workshops. This not only applies to Cargolux students, but, in the frame of enhanced synergies between Cargolux and Luxair, also to students at Luxembourg's national carrier.

The University of Bad Honnef also enjoys support such as knowledge exchange and provision of expertise regarding demands and changes in the industry for its Aviation Management programs.

SEE ALSO

- **SDG#8:** Decent Work & Economic Growth: *Youth Training and Development*
- **SDG#3:** Good Health & Well-Being, Pilot Support Development
- **SDG#5:** Gender Equality

CARGOLUX 2025

In 2016, Cargolux began a review and confirmation of its strategic focus. The resulting Cargolux 2025 strategy, drafted in 2017, has three pillars: Strategic Measures, Business Process Review and a Digital Roadmap.

These goals are reflected in virtually all activities of the company. Ultimately, Cargolux 2025 is aimed at ensuring the continuity and sustainability of the organization. At its heart is a built-in flexibility that allows the airline to be agile and lean, ready to seize market opportunities without undue additional costs.

Strategic Measures: Cargolux's new strategic plan emphasizes having a flexible fleet, able to take advantage of changing market conditions without undue additional cost.

Digital Roadmap: A main tool of Cargolux 2025 is a review program that has mobilized staff and management around finding better, and even more productive methods for executing key business processes. This integrated digitalization of key processes and improved communication between divisions/departments are welcomed by-products of this holistic and systematic review. With each supply chain automation comes an even stronger connection with the customer.

Business Process Review (BPR) & Design: Cargolux staff are proud of their work and organization but they continuously search for improvements. During 2017, the airline embarked on a company-wide transformation initiative to modernize work processes, "future-proof" the organization and thus ensure the sustainability of the airline. This program contributes to job stability and growth, and includes training in more efficient work practices (Lean), particularly in M&E. The BPR is an element within the Cargolux 2025 goals of digitalization and transformation. It highlights employees at every level of the organization as they identify even small changes that can make a big difference. With retention rates that far exceed the norm in most industries, the seasoned Cargolux team is well-placed to give feedback on how to move to a leaner, more agile environment, and are providing information that is integral to the BPR decision-making process. This BPR ensures that Cargolux is taking every opportunity to strengthen the relationships with long-standing customers and create an unassailable value proposition for new ones.

In September 2017, the M&E Division launched a comprehensive improvement program. The objective of the program is to review critical M&E processes and to introduce new technologies thus assuring the competitiveness of the division for the future. One of the methodologies used is Lean Management which systematically minimizes waste. In parallel, training in Lean Management principles was introduced for all M&E Staff. By using this new knowledge, staff are able to apply the principles in their daily work, and improve processes and standards in M&E.

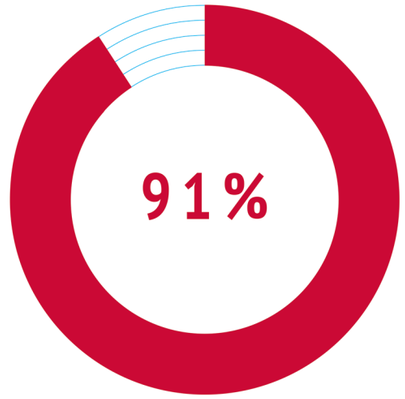
Pilot projects were launched in Shipping & Receiving where the work area was redesigned to improve process flow, and for the preparation of hangar checks. The project for hangar checks aims to improve the check preparation process and to enable better control of check execution. The next significant M&E improvement project will be the introduction of mobile devices in maintenance, which will digitize the main work processes, eliminating most paper work cards.

SUSTAINABLE PROCUREMENT

Cargolux's objective is to guarantee the optimal balance between the quality of goods and/or services and cost effectiveness. This fundamental principle ensures that the airline can support its partners and service providers with sustainable business practices. This is especially important in such a highly competitive field. Its Procurement Policy guides all staff through a consistent and vetted process which considers the environmental impact of goods (eg, investments, transportation, storage, etc.). This means that cultivating and encouraging local providers is an important element in the process. The Contracts and Procurement process provides suitable segregation of decision-making and duties between the department requiring the goods/services, procurement, and payment approval.

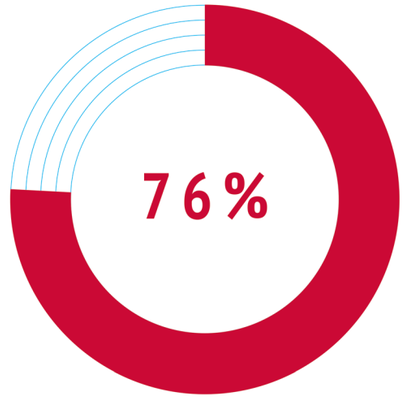
As a general rule, each department is responsible for procuring its required goods/services. Cargolux uses a standard tender process that employs frequent dialogue to ensure as much information as possible is available. The tender process includes receiving at least three (3) bids for any specific requirement and then discussions with the supplier and process owner to refine understanding of any boundaries or constraints. Potential suppliers are selected based on objective criteria such as technical expertise, past experience, quality of proposed staffing, relevant credentials, resources, geographical coverage, possession of necessary licenses (where applicable). All contracts must specify goods/services required, milestones, method and timing of payments. As an international company, Cargolux takes pride in working with suppliers of different sizes and ownership structure. It chooses suppliers based on their ability to provide goods/services of high-quality that are cost effective.

Procurement trends are reviewed periodically to ensure the Cargolux procurement policy reflects the current, and global, supply/demand landscape.



of the orders done by General Purchasing are with **Local Suppliers**.

The order **Value of Local Procurement** represents



SDG#9: BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

GRI 413-2

Innovation is a hot topic everywhere, including at Cargolux. Innovation comes from individuals, but it requires sponsorship from management to work. Cargolux capitalizes on the best and brightest ideas to outperform competition. The whole team strives to continuously identify customer needs and to design innovative and winning solutions for the industry.

INNOVATION EVERYWHERE

Brainwaves: The Cargolux employee suggestion scheme is an ongoing program that encourages the staff's creative thinking, providing a channel for innovative ideas to enhance the airline's efficiency, productivity and to improve the performance and quality of day-to-day work. Suggestions are evaluated by specialists in the relevant area of the organization and successful proposals are implemented and rewarded.

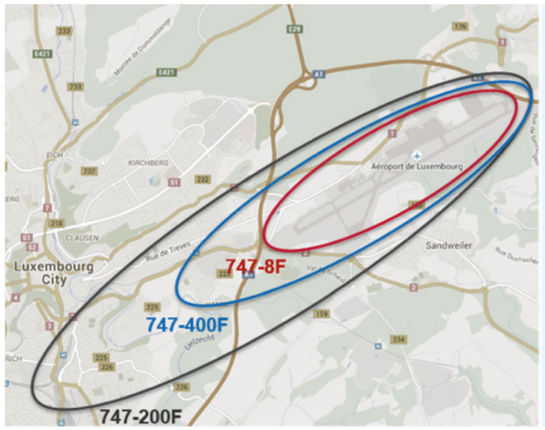
Big Data! Cargolux supports and capitalizes on technological innovation in the industry to detect and correct problems early. Smart on-board sensors are processing and storing more and more information. Maintenance and Engineering (M&E) uses this data to predict trends in the aircraft's health, and each component on board. Instead of just following industry averages for checks, the team now watches trends and is more in tune with the optimal timing for all aspects of maintenance and service. As well as lowering cost, this approach will ultimately increase reliability, efficiency and safety.

Drones: Adding to safe maintenance practices is part of the DNA of M&E. In 2017, the Cargolux team tested the use of drones for inspecting aircraft surfaces. Drones provide detailed information and high-resolution photos to assess potential problem areas or damage without anyone leaving the ground.

NOISE ABATEMENT

Cargolux is aware that its activities affect the communities around the airports it operates from and strives to minimize the impact of these activities as much as possible. Noise control and monitoring is therefore an important area of environmental concern for the company; especially in Luxembourg where most of its aircraft movement takes place.

Cargolux operates the world's quietest freighter aircraft in its class. Both the Boeing 747-400F and the 747-8F represent a significant measurable improvement for the surrounding communities. The 747-8F, with advanced engine technology and new wing design, reduces the already low 85db take-off noise footprint by another 30%. Both aircraft types fully comply with ICAO chapter 4; the most stringent aviation standard.



Additionally, the company continues to identify, study and implement operating procedures that provide further opportunities for efficient and conscious noise management, fuel optimization and CO_2 reductions. Substantial gains have been realized through programs such as:

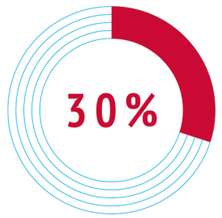
Reduced Flap Settings: Using revised flap settings reduces the amount of thrust required by the engines for landing. In Luxembourg, landings are limited to idle reverse thrust to reduce noise levels.

APU Off: The aircraft's auxiliary power unit (APU) is not used for arrivals in Luxembourg to reduce the noise on the ramp. Instead, a ground power unit is used to supply electricity to the aircraft.

Active Quiet Climb: This takeoff procedure is used while overflying noise-sensitive areas and incorporates a climb to a certain level before reducing engine thrust. This procedure is used with the company's new 747-8 fleet.

Three Engine Taxi: Cargolux aircraft shut down one of four engines during taxi to the parking position.

Continuous Descent Approach:
Developed in collaboration with Cargolux, ANA (Administration of Air Navigation), and Luxair, and with coordination from DAC (Direction de l'aviation civile), this approach design decreases noise within a 10+ nautical mile radius of Luxembourg airport. It permits an aircraft to follow a continuous descent path; optimizing speed and trajectories. This smooth-profiled descent replaces the stairsteps method, where descent permission is granted in stages, as the plane holds at different altitudes.



take off noise footprint (747-8F)

DIGITAL: PAPERLESS CARGOLUX

Supporting an innovative environment is a standard discussion item in Cargolux. The latest **e-mobility** project in M&E is testing the viability of digital aircraft maintenance and overhaul. Currently, thousands of pages of manuals and task cards are printed each year. A digital process that employs iPads and electronic process management software saves paper, time, and effort. It also enables better information sharing, including allowing statistics to be tracked and reported more easily and accurately.

On the Flight Operations side, the introduction of the **electronic flight bag** (EFB) helped to reduce aircraft weight by eliminating all paper, including maps, from the cockpit and post-flight process. The latest development in this technology is **independent electronic flight bags**. These EFBs are not attached hardware in the aircraft. Paired to any device, they allow apps to be loaded, making it easy to update or even change out the EFB. With real-time ground-to-air communication functionality, they furnish a variety of data that can be used to monitor and safeguard the flight and its contents.

For the customer, **e-booking** is used to book shipments on Cargolux flights. It supports customer information and provides shipment information anytime, anywhere, without the need for cumbersome email chains or telephone calls with booking agents. This ‘order to cash’ approach, removes the need for repetitive, onerous routine work and increases the shipments’ visibility.

Symfact contract management software helps increase productivity, efficiency and transparency by streamlining and centralizing management processes for legal agreements. Responsible staff can now access software anytime, anywhere, with a simple internet browser, and easily follow up on contracts in review and/or approval.

ENVIRONMENTALLY FRIENDLY SOLUTIONS

Environmentally Friendly Beam Solution:
In 2017, Cargolux Airlines signed an agreement with Trinkaus-Solutions (Germany) for the use of its squAIR-timber product. These humidity-resistant, cardboard fiber composite beams have a load capacity of up to 10 tonnes and only contain raw materials from sustainable sources. With a weight of only 1.2 kilograms per meter, the beam is 80% lighter than conventional wood and allows more payload and lower fuel consumption for Cargolux aircraft. This directly translates to lower aircraft engine emissions. Cargolux estimates that the use of squAIR-timber has the potential to reduce its fuel consumption by roughly 1,200 tonnes per year. In addition, squAIR-timber solution enables shorter build-up times, eliminating the need for forklifts as they can easily be handled by one person. They can be reused and are 100% recyclable with lower disposal costs than wood.

Cargolux is an airline with an intense focus on environmental issues and appreciates the full recycling capability of squAIR-timber product. It is the first airline worldwide to introduce this lightweight material in its operation, and currently uses it on all pharma shipments out of Luxembourg.

The use of modern, environmentally-conscious tools in air cargo underlines Cargolux’s standing as a green cargo carrier and its commitment to the airline’s customers, who increasinlgy appreciate working with environmentally responsible partners. With the squAIR-timber product, Cargolux offers its customer an enhanced and more flexible service while using environmentally-friendly materials.

Cargolux – SkyCell Partnership: Cargolux and SkyCell have teamed up in a container rental partnership to offer Cargolux’s pharma customers enhanced service. SkyCell is a Swiss-based, award-winning provider of temperature-controlled container solutions, with a special focus on emerging markets and sustainability. This initiative has one overriding goal: producing the safest container on the market. With its new containers, Cargolux can safely transport pharma products in the +2°C to +8°C and +15°C to +25°C range, with outside temperatures between -35°C and +65°C, even over multiple days. The hybrid function of the SkyCell containers compensate for temperature segregation issues at destinations where the facilities cannot accommodate pharma shipments with stringent requirements.
The SkyCell containers heighten service quality while lowering weight and increasing net volume – effectively reducing CO_2 emissions. The 100% recyclable components contribute to the Cargolux lean philosophy, while underlining its sense of responsibility for the environment. The containers are a boost to Cargolux’s cool chain transport services that also offer personal attention, detailed tracking, and temperature monitoring for its customers.

SEE ALSO
- **SDG#12:** Responsible Consumption & Production
- **SDG#13:** Climate Action
- **SDG#17:** Partnerships for the Goals

SDG#12: ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

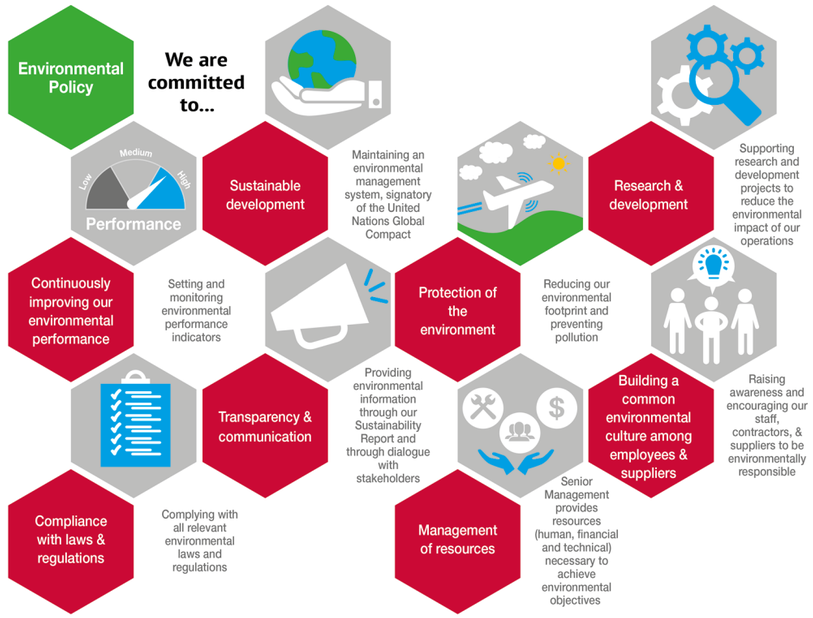
GRI 204-1, GRI 301-1, GRI 302-1, GRI 302-2, GRI 302-3, GRI 305-1, GRI 305-2, GRI 305-4, GRI 306-1, GRI 306-2, GRI 306-3

Cargolux operates a fleet of modern Boeing 747-8 and 747-400 freighters; the world’s quietest and most fuel-efficient freighter aircraft in its class. Both the Boeing 747-400F and the 747-8F represent significant advances in engine technology and wing design, which reduce take-off noise and fuel consumption.

Additionally, the company continues to identify, study and implement operating procedures that ensure responsible consumption and provide further opportunities for improving production efficiency.

ISO 14001 AND ENVIRONMENTAL POLICY

In 2017, a new Environmental policy came into effect which reflects the changes in the ISO 14001 2015 standard. The Environmental policy is the master document of ISO 14001. It provides a summary of the company’s environmental commitments (Fuel reduction; improvement of carbon footprint; reduction on waste; transparency, etc.) During 2017, the company readied itself for certification renewal in 2018 (according to the new ISO standards). This is well within the deadline to comply with the new requirements.



TRUCKING

In terms of Global Logistics, the TMS (Truck Management System) reduces the number of trucks on the road by optimizing load / location / availability data. TMS allows third-party trucking fleets to operate more effectively with Cargolux in Europe.

	2017		2016	
Category	**QTY**	**%**	**QTY**	**%**
Euro 6	**581**	**95**	24	2.5
Euro 5	**13**	**2**	259	27.2
Euro 4	**16**	**3**	672	70.3
TOTAL	**610**	**100**	955	100

WASTE MANAGEMENT

Cargolux runs a waste management system that enables the company to better control and segregate the waste it generates. This system is operated by a specialized external company that manages and monitors the correct collection, separation and disposal of all categories of waste, including recyclables and hazardous waste.

	2017	2016	
Fraction	**QTY/KGS**	**QTY/KGS**	**VARIATION %**
Recyclable	**81,174**	91,172	-11.0
Oily Waste	**21,527**	23,031 [20,031]*	7.5
Hazardous Waste	**173,752**	165,410	5.0
Residual Waste	**112,267**	109,829	2.2
Others	**6,911**	7,826	-11.7
Total	**395,631**	349,268 [394,268]*	stable

* Wrong figures reported in 2016

Recycling is an important factor in the company's waste management system. All facilities and rented offices in Luxembourg are equipped with a waste-sorting and recycling system. Wastewater from the airline's maintenance operations and maintenance facilities in Luxembourg are collected directly by the airport sewage system and sent to a wastewater treatment plant.

The company handles oil-contaminated waste with an innovative oil absorber product as well as waste compactors that have the added benefit of reducing transportation costs and emissions that would otherwise result from the waste disposal process. The Cargolux Maintenance Center recorded no spills during the year.

Although Cargolux enjoyed a 7.9% increase in flight activities, which leads to higher utilization, waste disposal remained stable.

AMBITION TO GO PAPERLESS

Paper recycling is integral to waste management efforts. The company encourages its staff to adopt measures that reduce waste production such as using electronic storage for documents and communication, or using recycled paper more. In the context of 'Digital Cargolux', each division is reviewing its processes which will ultimately result in reduced paper or even paperless processes for the future. These initiatives include:

OHS started a test phase to run paperless Risk Assessments for OHS.

Global Logistics: The Compass project is part of a process review and will result in a reduction of paper exchanges with GHA (LUX).

M&E initiated an e-mobility project that will result in a reduction of paper.

HR is in the process of implementing a new digital HR platform where several processes will be moved from paper-based to digital, starting with recruitment and onboarding.

AT A GLANCE: ENVIRONMENT

KEY FIGURES

27
B 747 AIRCRAFT

freighters:
14 747-8F,
13 747-400F

8 YEARS

Average age
of the fleet on
31 December 2017

FUEL & EMISSIONS

One of the best
carbon footprint
in its class

1,307,663
TONNES

Jet fuel

4,119,139
TONNES CO_2

486 GR
CO_2/FTK

Carbon footprint

NOISE

One of the best
noise footprint
in its class

100%

of the Cargolux fleet is
compliant with ICAO
Chapter 4

WASTE

Despite significant
increases in flights
and maintenance
activities, the waste
disposal remained
unchanged

21%

of waste produced
is recyclable
(Luxembourg only)

ENERGY SAVINGS

The replacement of high-pressure halogen (HQ) light fixtures in the hangar with LED lights resulted in significant energy savings and allowed Cargolux to take advantage of new technology in the field. It also has a positive impact in terms of waste reduction.

SEE

- **SDG#13:** Climate Action: *Fuel Club / Fuel Round Table / Fuel Consumption for an Efficient Fleet*

SEE ALSO

- **SDG#13:** Climate Action
- **SDG#17:** Partnerships for the Goals

SDG#13: TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACT

GRI 302-1, GRI 302-2, GRI 302-3, GRI 304-3, GRI 305-1, GRI 305-2, GRI 305-4, GRI 305-5, GRI 401-3, GRI 413-2

It is undeniable that aviation plays its part in the global climate change, but world trade, global economics, healthcare and a decent standard of living rely on sustainable air freight transport. Cargolux recognizes its responsibility toward the environment and its impact on the communities around the airports it serves. It accepts its obligation to lessen this impact as much as possible and firmly believes that achieving this goal requires the collaboration of all partners in the transport chain as well as aircraft and engine manufacturers and governments.

Geraldine GUEBEL
Manager Environmental

"We focus every day on constantly reducing our environmental footprint. We develop initiatives to address environmental responsibility in everything we do."

LABEL OF ENVIRONMENTAL EXCELLENCE

Cargolux is witnessing a growing commitment for environmental and social awareness, among its staff, customers, and the industry in general. Cargolux strives to continuously expand its engagement toward the environment, its neighbors, and the people whose livelihood rely on the economic success of the company. This continues to contribute positively to the actions and programs it has in place; programs that have been recognized by authorities and organizations alike as shown by ISO 14001, Lean & Green, and 'Superdreckskescht fir Betriber' environmental labels. 'Superdreckskëscht' is a program run by Luxembourg's Ministry for Sustainable Development and Infrastructure. The label is awarded to Luxembourg companies that demonstrate exemplary waste management practices, including waste avoidance measures, safe and environmentally-friendly waste storage, selective collection and a transparent waste recycling and disposal system. This certificate is subject to annual renewal following audits that verify the Company's adherence to these principles.

COMMITMENT TO CLIMATE PROTECTION GOALS

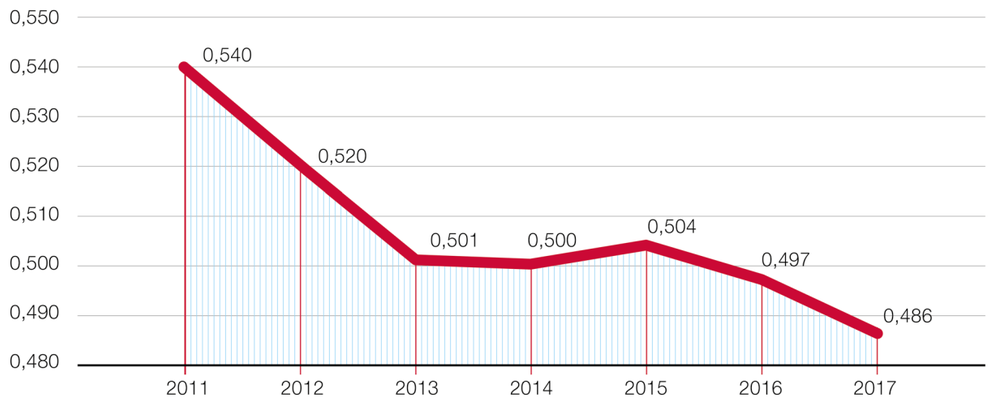
Cargolux has defined near- and long-term goals that follow IATA's targets for airlines to reduce CO_2 emissions with the aim to eventually achieve carbo-neutral growth. During the 2017 reporting period, the company reduced its carbon footprint by 2.2%, which is well above IATA's goal of 1,5% per year until 2020. Since the introduction of the 747-8 freighter in 2011, Cargolux has increased its fuel efficiency by 10%.

Cargolux commits to:

- **an improvement in average fuel efficiency of 1.5% per year until 2020;**
- **a cap on aviation CO_2 emissions from 2020, in effect carbon neutral growth;**
- **a reduction in CO_2 emissions of 50% by 2050, relative to 2005 levels.**

CO_2 emissions reduction & control are important first steps toward a carbon-neutral company. Cargolux complies with the European Union's Emissions Trading System (EU-ETS) reporting requirements and continues to monitor and report CO_2 emissions.

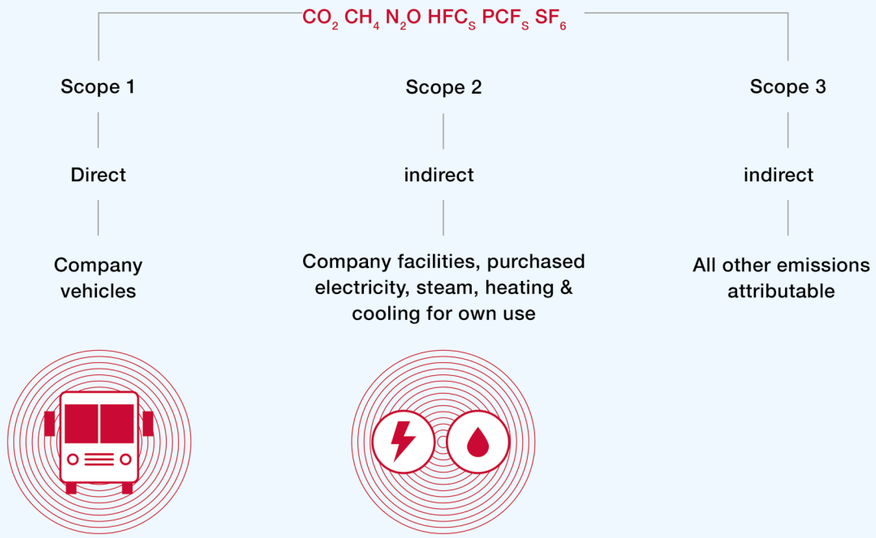
CO_2 EFFICIENCY / FTK



Greenhouse Gas Protocol Scope:

SCOPES

The Greenhouse Gas Protocol defines three scopes of emissions:



Scope 1

The Cargolux Group can show exemplary greenhouse gas emission management for its fleet. Based on 12.1 million ATKs (available tonne kilometers) for the Cargolux and Cargolux Italia fleets, the CO_2 efficiency reached 0.34 kg CO_2 per ATK.

Scope 2

Cargolux offices and facilities recorded a CO_2 emission of 2,003 tonnes for fuel and gas heating during 2016. Use of electricity emitted no CO_2.

Scope 3

Category that covers all other indirect emissions attributable to the activities of Cargolux, but from the company. Scope 3 has no relevance to the reporting of Cargolux and is not included here.

	2017	2016	VARIATION
CO_2 efficiency / FTK	**0.486**	0.497	-2.2%
GSE VEHICLES			
Lead-free (liters)	**3,984**	3,210	+24.11
Diesel (liters)	**14,658**	20,851	-29.70%
Diesel / industrial machines (liters)	**69,530**	74,482	-6.31%

Reducing waste; improving recycling: Although CO_2 emissions are considered to be the most harmful of greenhouse gases, Cargolux is also addressing other waste contributors that impact the environment and emissions for the fleet and the company.

Core engine compressor wash: This cleaning process is performed on the GENX-2B, CF6-80C2B5F and selected RB211-524H2-T engines with low N3 speed margin. Engines are washed about twice a year.

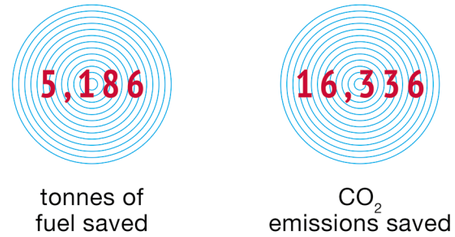
Performance improvement package (PIP): is a retrofit program for the airline's GEnx engines from the early 747-8Fs. This initiative improves the efficiency and life of the engine and has a positive impact on fuel consumption.

FUEL CONSUMPTION FOR AN EFFICIENT FLEET

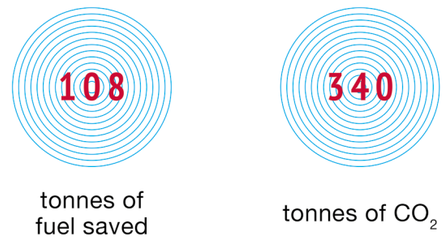
Cargolux operates a fleet of 27 Boeing 747-8F and 747-400F. The B747-8F represents a significant monetary investment for the company but this fuel-efficient and quiet aircraft yields excellent results operationally and environmentally. Communities especially, benefit from a further 30% reduction in take-off noise compared to the already excellent values of the company's 747-400 freighters. Operating the most efficient and environmentally friendly aircraft results in a measurable improvement in fuel efficiency as well as a reduction in noise and CO_2 emissions.

FUEL AND CO_2 EMISSIONS REDUCTION IN 2017

Flight Operations



No APU after landing LUX



Flight Operations further supports the goal of increased fuel saving and reducing CO_2 emissions, through route and network optimization. This gives preference to direct flights over technical stops and employs random routing, and fair-weather alternatives.

The **Fuel Efficiency Round Table**, initiated in 2016, is a perfect example of cross-divisional projects within Cargolux. With Flight Operations taking the lead, many other departments also contributed to its success. Maintenance, Engineering, Ground Operations, Network and Crew Training – everyone involved in this Round Table is an expert in their field, promoting the project within their division and department. The Round Table's primary mandate is to identify potential savings and take steps to realize both lower environmental impact and improved bottom line. With the help of such a focused group, Cargolux is able to capitalize on its fuel-efficient fleet advantage by further reducing fuel burn per block hour by as much as an additional 0.5%.

To support this, high-quality data is crucial. Cargolux uses a technologically advanced fuel efficiency software that simplifies data gathering, analysis and reporting, helps to identify additional fuel savings, and monitors the progress of existing fuel saving initiatives. Without a doubt, Cargolux has led the way in both reducing its environmental impact as well as lowering its fuel cost per hour, making it one of the most efficient B747 operators in the industry today.

SEE ALSO

- **SDG#9:** Digital: Paperless Cargolux
- **SDG#12:** Responsible Consumption & Production
- **SDG#17:** Partnerships for the Goals

SDG#16: PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

GRI 205-1, GRI 205-2

Cargolux ranks as a leading supplier of high-quality air cargo services to customers around the world and thus, works with a variety of cultures. The airline has committed to support and strengthen an ethical business culture that promotes compliance with all applicable laws and regulations, and adherence to internal rules and policies. An ethical corporate as well as individual attitude, fosters sustainable and profitable long-term business relations, built on trust, and prevents risk to reputation or financial damage.

Just Culture: Cargolux operates under the Just Culture principles. This concept has been specially developed to enhance the reporting of safety-related events but Cargolux has also decided to extend the principles throughout the whole organization. Just Culture aims at reinforcing an atmosphere of trust in which people feel encouraged to provide essential safety related information. The Just Culture approach balances the objective to establish a constructive, non-punitive reporting and learning environment with the recognition of the need for accountability of individuals for their actions.

SEE ALSO

- **SDG#3:** Safety and Just Culture
- **SDG#8:** Decent Work & Economic Growth: *Teamwork & Commitment*
- **SDG#17:** Partnerships for the Goals

SDG#17: STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

GRI 304-3

As a good neighbor and supporter of cultural and educational activities in Luxembourg, Cargolux supported a range of initiatives and signed a number of partnerships in 2017. Local artists and cultural institutions were sponsored, as well as humanitarian causes, through its cooperation with non-governmental organizations that help people in need.

THE FINE ARTS

With a worldwide presence, Cargolux is in a perfect position to enrich the cultural life of its home country and to support Luxembourg artists in their international exposure. In 2017, Cargolux signed a 3-year partnership agreement with the MNHA (Musée National d'Histoire et d'Art) to transport exhibits free of charge. The company has also supported MUDAM and its artists for more than a decade. Whether moving whole art exhibitions or a single installation, Cargolux has an outstanding reputation in the art world for being safe, professional, and always on time. Sponsorship by Cargolux helps MUDAM, and Luxembourg, stay in the foreground of the contemporary art world. In an industry where reputation influences the ability to collaborate with other museums, credibility is very important. It is accomplished artists and professional suppliers like Cargolux that help MUDAM build its international reputation.

Cargolux has a longstanding expertise in flying artwork and valuable goods and its CV Precious product not only meets the highest security standards but sets them. Logistical planning around an art exhibition does not start with the transport and, due to the size and bulkiness of the artwork, the feasibility of an exhibition becomes increasingly dependent on Cargolux's support and ample experience in the field of art transportation.

Cargolux also supports **Art2Cure**, a charity that organizes art events to raise funds in support of Luxembourg Centre for Systems Biomedicine (LCSB), a biomedical research center that studies neurodegenerative conditions with a focus on Parkinson's disease. Art2Cure receives art donations from high-profile Luxembourgish artists that are sold at an exhibition event to support the research.

LOCAL LIFE

Cargolux recognizes the importance of being involved in, and supporting, local events and activities. Science, technology, and the environment are all closely related to the air cargo industry and to Cargolux's CSR endeavors. The airline is proud to be active sponsors of…

Luxembourg Science Center: In 2017, Cargolux partnered with this new science and technology discovery center which offers about 100 experimental stations in Luxembourgish, English, German, French, and Portuguese. The partnership includes sponsorship for the center's exhibits, and transportation support for equipment and important elements for interactive displays.

Science week: This fun annual event introduces and promotes science, scientific activities, and studies in Luxembourg. It is used to pique the interest of young people, and to showcase Luxembourg's commitment to this important industry to the public. Activities and exhibits help participants become more curious about science, technology, and jobs in these fields.

Hëllef fir d'Natur: Cargolux makes an annual contribution for this worthy Luxembourg environmental foundation. This contribution sponsors the acquisition and transformation of woodland into protected nature reserves. This program helps safeguard the natural heritage and biodiversity of Luxembourg.

SPORTS SUPPORT

Cargolux also recognizes the value of supporting sports and youth, which includes:

- **AB Contern:** Cargolux is a sponsor of this popular Basketball team.
- **Fédération Luxembourgeoise de Tennis de Table (FLTT):** Cargolux sponsored two key events; the Table Tennis Championship, and the 2017 World Junior Circuit finals.
- **Widdebierglaf in Mensdorf**: This cross-country run's claim to fame is the challenging elevation and conditions. Old and young runners alike can face rain, and mud, on their uphill journey into the forest.

FOR THE CUSTOMERS

A positive customer experience is the building block of good business. The company's **Global Accounts Team** focuses on dedicated customer contacts and short reaction time for requests and to market developments. The airline's **Pricing Department** also plays an important role in customer relations and provides enhanced data and information. The **Product Team** members help customers with special cargo requirements and tailor-made solution for specific needs.

SEE ALSO
- **About the Company:** Industry Associations

ABOUT THIS REPORT

GRI 102- 45, GRI 102-46, GRI 102-48, GRI 102-49, GRI 102-50, GRI 102-51, GRI 102-52, GRI 102-53, GRI 102-54, GRI 102-55, GRI 102-56

This CSR annual report provides information about ongoing CSR initiatives and programs as well as an update on new programs started during the period of 01/01/2017 to 31/12/2017 and pertains to Cargolux's overall operations and geographic presence, except where otherwise specified in the report.

The report describes the company's efforts within an incredibly competitive industry and stressful market environment that challenged the global air cargo industry. Despite changing annual difficulties and economic realities, Cargolux is committed to, and takes care of environmental and social issues that impact its business, partners and local communities.

Certain indicators cover Luxembourg-based activities only. These include figures relating the company's employees and data related to occupational health and safety. Data monitoring and the company's waste disposal also relates to its facilities in Luxembourg only. The report does not cover the activities of separate legal entities fully or partly owned by Cargolux. Monitoring of fuel consumption and CO_2 emissions includes the data collected by Cargolux Italia. The development of details included here, is based on the continued analysis of the company's main impact and responsibilities. It encompasses concerns for the environment and society, and concerns raised by key groups of stakeholders in this area.

This report has been prepared in accordance with 'GRI Standards: CORE Option' in line with the Sustainable Development Goals Framework enacted in 2017. Cargolux endeavors to constantly review and further elaborate its Corporate Social Responsibility program and the Sustainability Reporting Process.

This report is reviewed by an independent third party, which provides limited assurance. The previous report was published in April 2016.

CONTACT POINT

Cargolux invites all interested parties to enter into dialogue about its sustainability policy, its activities, and this report. The company's policy, details about its activities, and previous reports, can be found on its website at http://csr.cargolux.com. All comments and enquiries are welcome and can be forwarded through the contact form on the aforementioned webpage, or by writing to corpcom@cargolux.com.

APPENDIX SOCIAL AND ENVIRONMENT

EMPLOYMENT

	2017	2016	2015
Number of staff			
Worldwide	**1,916**	1,856	1,779
Headquarter	**1,436**	1,389	1,335
Rest of the world	**480**	467	446
Percentage of women	**19**	20	20
Permanent contract	**1,865**	1,798	1,622
Newly hired	**149**	207	181
CWA	**1,240**	1,199	1,164
Female	**160**	159	0.08
Male	**1,080**	1,040	0.57
Turnover	**87**	120	107
Retention rate after parental leave	**-**	-	100%
Number of employees by age groups			
Under 30	**269**	249	254
30-50	**1,162**	1,166	1,125
Over 50	**485**	441	400

ABSENTEEISM

	2017	2016	2015
Lost days for accidents	**386**	346	362
Lost days for sickness	**13,576**	12,163	12,741
Maternity leave	**6,278**	7,566	1,592

OCCUPATIONAL HEALTH & SAFETY

	2017	2016	2015
Number of injuries (accidents)			
Internal	**43**	27	26
External	**11**	10	14
Injury rate	**-**	-	-
Work related fatalities	**-**	-	-
Occupational disease rate	**-**	-	-

TRAINING

	2017	2016	2015
Number of training hours per employee	**77**	64	87

ENVIRONMENT

	2017	2016	2015
Materials			
A/C cleaning products, TOTAL (ltrs)	**31,075**	37,955	34,017
Honey bee	**349**	401	402
A/C cleaner	**27,326**	34,456	32,760
Hydraulic removal	**3,400**	3,098	855
A/C dry wash soap	**311**	-	-
De-icing and anti-icing product, TOTAL (kgs)			
Tarmac/airside (ltrs/kgs)	**8,900**	3,400 / 1,600	6,000 / 2,750
Salt (parking/road)	**13,675**	11,075	13,175
Paper (DIN A4) (kgs)	**28,906**	-	24,400
Cartridges (pcs)	**37**	-	162
Emissions			
Direct emissions			
CO_2 emitted by aircraft (tonnes)	**4,119,139**	3,746,552	3,485,274
CO_2 emitted by GSE vehicles	**49**	261	289
Indirect emissions			
Facilities	**2,003**	2,235	2,475

ENVIRONMENT (CONTINUED)

	2017	2016	2015
Consumption			
Water	**10,877**	10,309	9,183
Fuel (Heating systems)	**50,616**	79,210	70,052
Fuel (sprinkler pumps)	**4,508**	2,190	4,509
Electricity (kWh)	**5,814,638**	5,787,954	5,582,725
The following data regarding the indirect Energy Consumption are only available for CMC			
Heating (kWh)	**4,667,700**	5,445,500	6.227,000
Cooling (kWh)	**426,900**	483,700	443,500
Compressed air (m^3)	**1,120,870**	1,040,123	994,885
Gas (m^3)	**889,081**	966,882	1,090,762
Fuel			
Jet A (tonnes)	**1,307,663**	1,189,382	1,106,436
GSE vehicles			
Industrial Fuel (ltrs)	**69,530**	74,216	91,926
Diesel (ltrs)	**14,658**	20,851	15,123
Unleaded Gasoline 95 (ltrs)	**3,984**	3,210	1,970
Waste			
Hazardous waste	**173,752**	165,410	124,948
Recyclable waste	**81,174**	91,172	74,103
Residual waste	**112,267**	109,829	117,086
Oily waste	**21,527**	20,031	21,801
Other waste	**6,911**	7,826	6,007

Wastewater from our maintenance operations at the maintenance facilities in Luxembourg are directly collected by the airport sewage system prior to a wastewater treatment plant.

GRI CONTENT INDEX

GENERAL DISCLOSURES 2017

Indicator	Description	Pages
Organizational profile		
GRI 102-1	Name of the organization	24
GRI 102-2	Activities, brands, products, and services	24
GRI 102-3	Location of headquarters	24
GRI 102-4	Location of operations	24
GRI 102-5	Ownership and legal form	Joint-stock company (Société Anonyme)
GRI 102-6	Markets served	24
GRI 102-8	Information on employees and other workers	80, 55
GRI 102-10	Significant changes to the organization and its supply chain	Nothing to report
GRI 102-11	Precautionary Principle or approach	27
GRI 102-12	External initiatives	27
GRI 102-13	Membership of associations	27
Strategy		
GRI 102-14	Statement from senior decision-maker	22
Ethics and integrity		
GRI 102-16	Values, principles, standards, and norms of behavior	7, 57
Governance		
GRI 102-18	Governance structure	14
Stakeholder engagement		
GRI 102-40	List of stakeholder groups	38
GRI 102-41	Collective bargaining agreements	55
GRI 102-42	Identifying and selecting stakeholders	38
GRI 102-43	“Approach to stakeholder engagement Key topics and concerns raised”	36
GRI 102-44	Key topics and concerns raised	37

GENERAL DISCLOSURES 2017 (CONTINUED)

Indicator	Description	Pages
Reporting practice		
GRI 102-45	Entities included in the consolidated financial statements	This report does not include information on other entities, except for the CO_2 emissions and fuel data where CV Italia is included.
GRI 102-46	Defining report content and topic Boundaries	36
GRI 102-47	List of material topics	37
GRI 102-48	Restatements of information	nothing to report
GRI 102-49	Changes in reporting	78
GRI 102-50	Reporting period	Calendar Year 2017
GRI 102-51	Date of most recent report	April 2017
GRI 102-52	Reporting cycle	Annual
GRI 102-53	Contact point for questions regarding the report	corpcom@cargolux.com
GRI 102-54	Claims of reporting in accordance with the GRI Standards	78
GRI 102-55	GRI content index	83-87
GRI 102-56	External assurance	88-89

SPECIFIC DISCLOSURES 2017

Indicator	Description	Pages
	ECONOMY	
Pertinent topic: GRI 201 - Economic Performance 2017		
GRI 201-1	Direct economic value generated and distributed	Annual Report
Pertinent topic: GRI 204 - Procurement Practices 2017		
GRI 204-1	Proportion of spending on local suppliers	61, 65
Pertinent topic: GRI 205 - Anti-corruption 2017		
GRI 205-1	Operations assessed for risks related to corruption	42, 75
GRI 205-2	Communication and training about anti-corruption policies and procedures	42, 75
GRI 205-3	Confirmed incidents of corruption and actions taken	Annual Report
Pertinent topic: GRI 206 Anti-Competitive Behavior 2017		
GRI 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Annual Report

Indicator	Description	Pages
	ENVIRONMENT	
Pertinent topic: GRI 301 - Materials 2017		
GRI 301-1	Materials used by weight or volume	55, 65, 82
GRI 301-2	Recycled input materials used	Not applicable
GRI 301-3	Reclaimed products and their packaging materials	Not applicable
Pertinent topic: GRI 302 - Energy 2017		
GRI 302-1	Energy consumption within the organization	66, 73, 82
GRI 302-3	Energy intensity	68, 71, 82
GRI 302-4	Reduction of energy consumption	70, 74
GRI 302-5	Reductions in energy requirements of products and services	74
Pertinent topic: GRI 303 - Water 2017		
GRI 303-1	Water withdrawal by source	82
GRI 303-3	Water recycled and reused	Nothing to report
Pertinent topic: GRI 304 - Biodiversity 2017		
GRI 304-3	Habitats protected or restored	76
Pertinent topic: GRI 305 - Emissions 2017		
GRI 103-1	Explanation of the material topic and its Boundary	49
GRI 103-2	The management approach and its components	49
GRI 305-1	Direct (Scope 1) GHG emissions	65, 70
GRI 305-2	Energy indirect (Scope 2) GHG emissions	65, 70
GRI 305-4	GHG emissions intensity	65, 70
GRI 305-5	Reduction of GHG emissions	70
Pertinent topic: GRI 306 - Effluents and Waste 2017		
GRI 306-2	Waste by type and disposal method	66
GRI 306-3	Significant spills	67
Pertinent topic: GRI 307 - Environmental Compliance 2017		
GRI 307-1	Non-compliance with environmental laws and regulations	Nothing to report

SPECIFIC DISCLOSURES 2017 (CONTINUED)

SOCIAL

Indicator	Description	Pages
Pertinent topic: GRI 401 - Employment 2017		
GRI 401-1	New employee hires and employee turnover	54, 55, 80
GRI 401-3	Parental leave	54
Pertinent topic: GRI 403 - Occupational Health and Safety 2017		
GRI 103-1	Explanation of the material topic and its Boundary	51
GRI 103-2	The management approach and its components	51
GRI 103-3	Evaluation of the management approach	51
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Indicator	Description	Pages
Pertinent topic: GRI 410 - Security Practices 2017		
GRI 410-1	Security personnel trained in human rights policies or procedures	Not applicable
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INDEPENDENT AND LIMITED ASSURANCE REPORT

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To the Shareholders of
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Independent Limited Assurance Report to Cargolux Airlines International S.A.

We have been engaged by the Management of Cargolux Airlines International S.A. ("Cargolux ") to provide limited assurance on the "Sustainability Report" of Cargolux for the year ending 31 December 2017.

Management's responsibility for the Sustainability Report

Management is responsible for the preparation and presentation of the Sustainability Report in accordance with the Sustainability Reporting Guidelines (GRI Standards) of the Global Reporting Initiative ("GRI") and the information and assertions contained within it, for determining Cargolux's objectives in respect of sustainable development performance and reporting, including the identification of stakeholders and material issues; and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

Responsibility of the Réviseur d'Entreprises agréé

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information as adopted for Luxembourg by the Commission de Surveillance du Secteur Financier. This standard requires that we comply with applicable ethical requirements, including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the Sustainability Report is free from material misstatement.

A limited assurance engagement on a sustainability report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the sustainability report and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Assessment of the suitability of the reporting criteria and their consistent application.
- Inquires of management to gain an understanding of Cargolux processes for determining the material issues for Cargolux key stakeholder groups.

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- Interviews with senior management and relevant staff at group level and selected business unit level concerning sustainability strategy and policies for material issues, and the implementation of these across the business.
- Interviews with relevant staff at corporate and business unit level responsible for data capture and preparation of the information in the Sustainability Report.
- Comparing the information presented in the Sustainability Report to corresponding information in the relevant underlying sources to determine whether all the relevant information contained in such underlying sources has been included in the Sustainability Report.
- Review of material qualitative statements in the report with regard to consistency and plausibility.
- Reading the other information presented in the Annual Report 2017 of Cargolux to determine whether it is in line with our overall knowledge of, and experience with, the sustainability performance of Cargolux.

The extent of evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore a lower level of assurance is provided.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Sustainability Report of Cargolux for the year ended 31 December 2017 is not presented fairly, in all material respects

Ernst & Young
Société anonyme
Cabinet de révision agréé

Werner Weynand

Luxembourg, 14 March 2018

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ISSUED AND EDITED BY

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